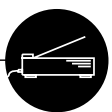


AXIS 700 Network Scan Server

**The Plug-and-Play Solution for
Distributing Scanned Information
Across Networks**



User's Manual v1.2

AXIS 700

Network Scan Server

User's Manual

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Caution! - potential hazard that can damage the product.

Important - potential hazard that can seriously impair operation.

Do not proceed any of the above notices until you have fully understood the implications.

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AXIS 700 User's Manual

Part No: 16848

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Revision 1.2

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Preface

Thank you for purchasing the AXIS 700 Network Scan Server. This product has been developed to connect your digital copiers and scanners anywhere in your network, simplifying distribution and archiving of information. The AXIS 700 can also be integrated with workflow and document management systems.

About This Manual

The manual provides introductory information as well as detailed instructions on how to set up and manage the AXIS 700 in various network environments. It is intended for everyone involved in installing and managing the AXIS 700. To fully benefit from the manual, you should be familiar with basic networking principles.

This manual applies to the AXIS 700 with software release 1.14 and subsequent releases until otherwise notified.

About Axis

Axis Communications is dedicated to providing innovative solutions for network-connected computer peripherals. Since the start in 1984, Axis has been one of the fastest growing companies in the market and is now a leader in its field.

ThinServer™ Technology - Being the core of all Axis' products, the ThinServer Technology enables them to act as intelligent file server independent ThinServer devices. A ThinServer device is a network server which includes "thin" embedded server software capable of simultaneous multiprotocol communication, scalable RISC hardware and a built-in Web server which allows easy access and management via any standard Web browser. The ThinServer Technology makes it possible to connect any electronic device to the network, thus providing "Access to everything".

Today, Axis Communications offers the ThinServer Technology as well as six major ThinServer product lines consisting of:

Network Print Servers - offer you a powerful and cost-efficient method for sharing printer resources in your network. They connect to any standard printer, featuring high performance, simple management and easy upgrading across the network. The print servers are available in Ethernet, Fast Ethernet and Token Ring versions.

IBM Mainframe and S/3x - AS/400 Print Servers and Protocol Converters - includes a wide range of LAN, coax and twinax attached print servers for the IBM host environment. By emulating IBM devices, these servers provide conversion of the IPDS, SCS and 3270DS data streams to the major ASCII printer languages.

Network Attached Optical Media Servers - provide you with a flexible and cost-efficient solution for sharing CD-ROMs, DVD-ROMs and other optical media across the network. They are available in Ethernet, Fast Ethernet and Token Ring versions.

Network Attached Hard Disk Servers - make it possible to easily make hard disk storage available in Ethernet networks. Through direct access by clients, yet integrating into existing security schemes and requiring a minimum of maintenance, they also provide a low total cost of ownership for network storage.

Network Camera Servers - provide live images using standard Internet technology, thus enabling access to live cameras via any standard Web browser. They offer a perfect solution for remote surveillance over the Internet and their sharp images can bring life into any Web site. These servers support Ethernet as well as PSTN and GSM phone lines.

Network Scan Servers - enable easy distribution of paper-based information across workgroups and the enterprise. By sending digitized documents to your destination via the Internet/intranet, you will reduce your faxing/mailing costs, as well as save time, thus improving your organization's efficiency.

Support Services

Should you require any technical assistance, please contact your local dealer. If your questions cannot be answered immediately, your local dealer will forward your queries through the appropriate channels to ensure you a rapid response.

If you are connected to the Internet, you can find online manuals, technical support, firmware updates, application software company information, on any of the addresses listed below:

WWW:	http://www.axis.com
FTP server:	ftp://ftp.axis.com/pub/axis

Axis User Group - Joining the Axis User Group will provide you with a number of benefits, such as regular product updates, access to the latest technology information and much more. And the best part of it is that it is all for free!.

Check out the Axis User Group site at http://www.axis.com/user_group/ for more information and your registration form.



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Section I Introduction

The AXIS 700 Network Scan Server

The AXIS 700 connects digital copiers and document scanners to Ethernet networks. Together with a scanning device, such as a digital copier or a scanner, it allows information such as documents, photographs and reports to be sent across the enterprise environment or around the world. The AXIS 700 can also be integrated with workflow and document management systems.

By sending the digital documents to the destination via the Internet/intranet, you will save time and faxing/mailling costs, and thus improve your organization's efficiency.



The AXIS 700 is a stand-alone unit, located beside the scanning device. You need one AXIS 700 for each scanning device.

We suggest that you place the scanning device and the AXIS 700 in the workgroup area, e.g. next to your printers and facsimile machines. This makes it convenient to distribute information electronically to e-mail addresses and application servers.

Features and Benefits

File Server Independence	The AXIS 700 is connected as a node in an Ethernet network, enabling scanning devices to be accessed through the network, via Internet and intranet-related protocols. It can be used independently of file servers, i.e. communication takes place directly between the network client and the AXIS 700, without network licensing fees. This results in high performance and reliability.
Simplicity	The file-server independent approach makes the installation quick and convenient. In most environments, the physical connection to the network is the only installation required prior to using the AXIS 700. No software needs to be installed on clients or file servers, except for applications for viewing the generated images in TIFF, JPEG and PDF format.
Internet/Intranet Web Server	The built-in Web server enables access to the AXIS 700 from any standard Web browser, such as Netscape Navigator or Internet Explorer. Thus, the AXIS 700 can be accessed from Windows, OS/2, Macintosh and UNIX workstations. The support includes scanning to Web browser and Administration tools.
Ease of Use	<p>The AXIS 700 is designed to be as easy as possible to install and use:</p> <ul style="list-style-type: none">• No special software to learn• Integrated scanning device drivers, image-file creation and network transfer methods• Auto-detection of scanning device type at start-up• Auto-selection of sheetfeeder or flatbed• Destinations and profiles saved for regular use• List of external e-mail addresses supported

- Flexibility** From the AXIS 700 control panel, you can send scanned documents directly to e-mail addresses and files on FTP servers or desktop file directories. You can also use a standard Web browser to trigger and save scanned documents. The available range of transfer methods and image formats enables you to adapt the AXIS 700 to your needs rather than the other way around.
- Speed** The AXIS 700 uses the AXIS ETRAX chip, a 32 bit RISC processor, and supports scanning devices with built-in compression and image-processing modules.
- Security** The Administration tools can be protected by password.
- Maintenance** Updated software can easily be downloaded to the Flash memory of the AXIS 700 over the network using FTP.

Section 2 Basic Installation

This section includes a brief product description and instructions for installing the AXIS 700 in your network environment.

You install the AXIS 700 in these steps:

- Connecting the AXIS 700 to the scanning device
- Connecting the AXIS 700 to the network
- Assigning an IP address
- Verifying the installation

Hardware Inventory

Unpack and inspect all parts for damage. Contact your dealer if anything is missing. All packaging materials are recyclable.

Standard delivery

Hardware		Model Variants	Part Numbers
Network Scan Server		AXIS 700	0075-1
Power Supply	AXIS PS-C	Europe	14235
		UK	14236
		Australia	14258
		USA	14256
		Japan	14257
	AXIS PS-E	Europe	15507
		UK	15509
		Australia	15510
		USA	15508
		Japan	15511

Media		Title	Part Numbers
CD-ROM		AXIS Online CD	
Printed Materials		AXIS 700 User's Guide	16849
		AXIS 700 Instruction Label	16088

Optional Accessories

Optional Accessories	Model Variants	Part Numbers
SCSI connectors	50-pin high-density shielded SCSI connector (micro-D)	14260
	50-pin high-density shielded SCSI connector (Centronics)	14259
Additional memory equipment	PLD.	15296
	16 MB SO-DIMM memory module	14799

AXIS Online CD

The AXIS Online CD provides an easy-to-use electronic catalogue, that includes all of the AXIS product software, utilities software, white papers, user documents, technical references etc. It can be used within all of the supported Axis computing environments.

Startup Procedures for Windows

The AXIS Online CD will autostart from a local CD drive on Windows 95/98 and NT platforms. Windows 3.1 users are required to navigate to the CD root directory and click on the `setup31.exe` file from within the Windows File Manager.

Startup Procedures for Macintosh, UNIX and OS/2

Navigate to the CD root directory and click on the `start.pdf` file from within your preferred file manager application.

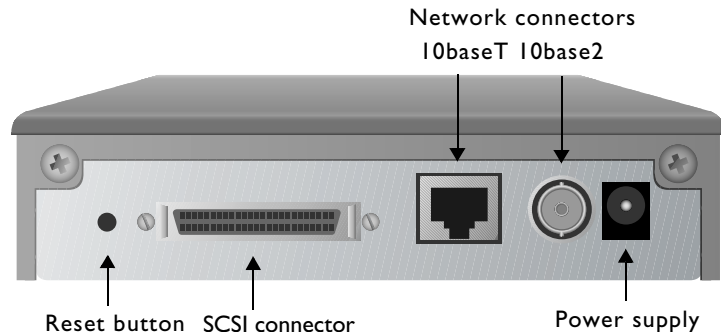
- Note:** ☐ If the Adobe Acrobat Reader 3.0 is not installed on to your system, locate and run the appropriate installer from the `tools/Acrobat/` folder. Refer to the `readme.txt` file for full path name details.

HTML Interface

By clicking the HTML button from within the main installation dialog, you access a Web browser interface to the contents of the AXIS Online CD. This interface allows Network Administrators to distribute the CD contents over intranet networks by simply broadcasting a URL reference.

Physical Description

Back Panel



Network Connectors The AXIS 700 is equipped with 10baseT and 10base2 connectors for connection to the Ethernet network.

Power Supply The AXIS 700 can use either the AXIS PS-C or AXIS PS-E power supply.

Reset Button The reset button is used for restoring the factory default settings. See “*Restoring Factory Default Settings*” on page 69.

SCSI Connector The AXIS 700 is equipped with a 50 pin SCSI connector for connection to a scanning device.

Front Panel The front panel indicators show the status of the AXIS 700. The indicators have the following functions:

Status The status indicator flashes during start-up and turns off when the AXIS 700 is ready for use. If it remains on, check the LCD for error messages.

Busy The busy indicator turns on when the AXIS 700 is allocated for use and remains on during the scanning process.

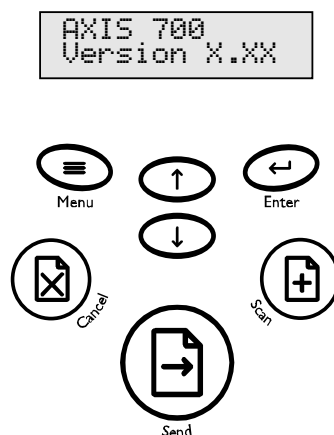
Network The network indicator indicates network activity.


Power The power indicator indicates that power is connected to the AXIS 700.


Note: ☐ While the AXIS 700 is idle, the Power indicator should be on, the Network indicator should flash randomly, and the Status and Busy indicators should be off.


Control Panel

The AXIS 700 message display consists of 2 lines of 16 characters indicating status and menu options.




Scan The Scan key  digitize the material in the scanning device. For magazines and books, use this key to digitize each page.

Send The Send key  sends the digitized material to the selected destination and releases the AXIS 700 for other users. For a single page/stack of paper, use this key to digitize the material and send the image in one step.

Menu The Menu key  scrolls the menu.

Enter The Enter key  selects multiple destinations.

Up/Down The Up  and Down  keys scroll and select menu options.

Cancel The Cancel key  cancels the process at any stage and clears any selections made from the menu. It also resets error messages.

Note: ☐ The AXIS 700 will always use the destination and scanning options most recently shown, whether explicitly selected or not.

Connecting the AXIS 700 to the Scanning Device

- Caution!** ☐ Make sure that the power supply (AXIS PS-C, 12 V DC, 36VA or AXIS PS-E, 12 V DC, 13,2VA) included in the delivery is marked with the correct mains voltage.
- ☐ Always make sure that power is **not** connected to any of the units when making changes to the SCSI chain. The SCSI bus may become damaged if you connect or disconnect units when the power is on.

To connect the AXIS 700 to your scanning device, follow these steps:

1. Connect the SCSI cable to the SCSI connector on the AXIS 700.
2. Connect the SCSI cable to the scanning device.
3. The AXIS 700 uses a built-in SCSI terminator.

- Note:** ☐ The scanning device must also be terminated properly. Refer to the scanning device documentation on how to do this.

Connecting the AXIS 700 to the Network

- Important!** ☐ Always consult the Network Administrator before making changes to the network configuration.

To connect the AXIS 700 to your network, follow these steps:

1. Turn off the AXIS 700 by unplugging the power supply.
2. Connect the network cable to the appropriate network connector, i.e. RJ-45 for 10baseT and BNC for 10base2, respectively.
3. Power up the scanning device.
4. Connect the external power supply to the AXIS 700. The AXIS 700 LED indicators will flash during power up and self test.

During the self test, this message will appear on the display:

```
AXIS 700
Version: x.xx
```

where x.xx is the software version number.

Assigning an IP Address

To establish communication with the TCP/IP environment, you must assign an IP address and optionally make up a unique host name for your AXIS 700. The IP address can be set from the AXIS 700 control panel, or using any of the conventional methods: DHCP, ARP, RARP or BOOTP. Choose your preferred method.


On Windows NT networks, DHCP is the recommended method since it allows a number of parameters to be set automatically, provided the DHCP server has been configured to do so.

On Macintosh networks, you can use DHCP or the control panel.

Refer to “*Other Methods for Downloading the IP Address*” on page 20 for more information on the DHCP, ARP, RARP and BOOTP methods.

Control Panel

To set the IP address from the control panel, follow these steps:

1. Acquire an unused IP address from your Network Administrator.
2. Power up the AXIS 700. Press Menu  when this display appears:






```
AXIS 700
Version: x.xx
```

3. After a few seconds this display will be shown:


```
IP address:
000.000.000.000
```

4. Press Enter  to edit the IP address:


```
Edit IP address:
000.000.000.000
```

5. Press Menu  to move through the digits and highlight each digit, one at a time.
6. Use   to increase or decrease each highlighted digit, as required.
7. Press Enter  to confirm the changes.
8. Press Menu  to display the default router address:


```
Default router:
000.000.000.000
```

9. Press Enter  to edit the default router address:


```
Edit router:
000.000.000.000
```


10. To change the value, repeat steps 5-7 above.
11. Press Menu  to display the subnet mask:


```
Net mask:
000.000.000.000
```


12. Press Enter  to edit the subnet mask:

```
Edit net mask:
000.000.000.000
```


13. To change the value, repeat steps 5-7 above.
14. Press Menu  to display the node address. This address is not editable. The node address should equal the AXIS 700 serial number found on the underside label of the unit.

15. Press Menu  once more to display the final instructions:

Press  if you
are finished







16. Press Enter  to exit the IP settings. The AXIS 700 then completes the startup sequence.
17. Note the name or IP address of the AXIS 700 on the instruction label and attach it to the top cover.

When the Status indicator stops flashing and remains off, the AXIS 700 is ready for use.

- Note:** ☐ Should you make a mistake while editing the parameters, press Cancel  to cancel the previous operation.

Verifying the Network Settings

To verify the network settings, you can access the Advanced menu from the AXIS 700 control panel.

1. Press Menu  a few times, until you reach the Advanced menu.
2. Use   to find the Network Settings option.
3. Press Enter  to enter the submenus.
4. Use   to scroll through the parameter settings.

- Note:** ☐ If DHCP service is running on your network, this might cause that your assigned IP address is overridden when you restart your AXIS 700. When you assign your IP address, make sure that the check-boxes for DHCP, BOOTP and RARP on the web interface administration pages Network settings/Detailed view are unmarked (they are marked as default).

Other Methods for Downloading the IP Address

As an alternative to the AXIS 700 control panel, you can use one of these methods for downloading the IP address: DHCP, ARP, RARP or BOOTP. All methods are enabled by default. If necessary, you can disable the RARP, BOOTP and DHCP methods by editing the configuration parameters.

The main characteristics of each of these methods are:

DHCP DHCP is available in Windows NT, UNIX and NW5. It requires a DHCP server on your network and operates on the entire network. It allows for automatic but temporary assignment of IP addresses from a central pool. DHCP will, when enabled, cause the selected host to automatically allocate and download an unused IP address, default router address and subnet mask to the requesting AXIS 700. It also provides validation data that defines how long the IP addresses will remain valid.

ARP ARP is available in Windows 95/98, Windows NT, UNIX and OS/2. It requires the IP address for each new device to be downloaded individually. Note that ARP does not work over routers.

RARP RARP is available in UNIX. It downloads the IP address to each device automatically. It requires a RARP daemon on your system and operates within a single network segment only.

BOOTP BOOTP is available in UNIX. BOOTP is similar to RARP, but operates on the entire network. It requires a BOOTP daemon on your system.

Procedures for using each of the methods are outlined later in this section.

Before you begin Make sure the AXIS 700 is powered on and attached to the network.

System Privileges You will need *administrator* privileges on the Windows NT server or *root* privileges on the UNIX system.

Ethernet Address Depending on the method you are using, you will need to know the Ethernet address of your AXIS 700. The Ethernet address is based upon the AXIS 700 serial number. You will find the number on the underside label.

IP Address Acquire an unused IP address from your Network Administrator.

Important! ☐ Do **not** use the IP address used in the examples.

Mapping a Host Name to the IP Address If you are using host names, you can map a unique host name to the acquired IP address. Refer to your system manuals or to your Network Administrator for instructions on how to perform the name mapping on your particular system.

Note: ☐ If the host name has not been included in the system host table, you can still perform the following instructions on how to download the IP address. In this case, simply replace the host name entry with the IP address wherever needed.

Using DHCP Follow these steps to use the DHCP method:

1. Edit or create a scope in the DHCP manager of the DHCP daemon. For Windows NT servers, refer to the *"Windows NT Resource Kit"* on how to do this. The entries made in this scope typically include the following parameters:
 - Range of IP addresses
 - Subnet mask
 - Default router IP address
 - Lease duration
 - Mail server IP address
 - DNS server IP address
 - Domain name
 - NTP server IP address
2. Activate the scope.

In the AXIS 700 configuration file, DHCP is enabled by default. The IP address and all the other settings will be downloaded automatically. You do not need to restart the AXIS 700.

Using ARP in Windows

In Windows 95/98 and Windows NT, you can download the IP address using ARP. Perform the following commands to download the IP address and verify the communication.

From the DOS prompt, type the following:

```
arp -s <IP address> <Ethernet address>
ping <IP address>
```

The `Ethernet address` equals the serial number of the AXIS 700 with each pair of digits separated by a hyphen.

Example:

```
arp -s 172.16.253.80 00-40-8c-11-00-86
ping 172.16.253.80
```

The host will return 'Reply from 172.19.2.254...' or a similar message. This indicates that the address has been set and that the communication is established.

Important!

- ☐ *Windows 95 only:* If the ARP table is empty, you must first ping an existing unit on your network before setting the IP address of your AXIS 700. Type `arp -a` to display the ARP table.

Notes:

- ☐ Once the AXIS 700 has established communication using an appropriate IP address, the `arp/ping` commands can be used to change the IP address only for 30 minutes. From then on it is locked until you restart your AXIS 700. The reason for this is to avoid accidental or unauthorized changes of the IP address. Restart the AXIS 700 to make it accept the setting of the IP address. You can perform a restart remotely via the AXIS 700 web interface. See "Specifying System Settings" on page 46.
- ☐ When you execute the `ping` command for the first time, the response time may be significantly longer than usual.

**Using ARP in
UNIX and OS/2**

In UNIX and OS/2, type the following commands to download the IP address and verify the communication:

```
arp -s <host name> <Ethernet or node address> temp  
ping <host name>
```

The Ethernet address or node address equals the AXIS 700 serial number with each pair of digits separated by a colon.

Example:

```
arp -s spserv 00:40:8c:11:00:86 temp  
ping spserv
```

The host will return 'spserv is alive' or a similar message. This indicates that the address has been set and that communication is established.

Notes:

- ☐ The `arp -s` command may vary between different systems. Some BSD-type systems expect the host name and Ethernet address in reverse order. IBM AIX systems require the additional argument `ether` for Ethernet networks, e.g. `arp -s ether spserv 00:40:8c:11:00:86 temp`
- ☐ Once the AXIS 700 has established communications using an appropriate IP address, the `arp/ping` commands can be used to change the address only for 30 minutes. From then on it is locked until you restart your AXIS 700. The reason is to avoid accidental or unauthorized change of the IP address. Restart the AXIS 700 to make it accept the setting. You can perform a restart remotely via the AXIS 700 web interface. See "*Specifying System Settings*" on page 46.
- ☐ When you execute the `ping` command for the first time, the response time may be significantly longer than usual.

Using RARP in UNIX

Follow these steps to download the IP address using the RARP method:

1. Append the following line to your Ethernet address table. This is typically performed by editing the file `/etc/ethers`.

<Ethernet address>	<host name>
--------------------	-------------

Example:

00:40:8c:24:c0:1c	spserv
-------------------	--------

2. If necessary, update your host table and alias name databases as required by your system.
3. Start the RARP daemon, if it is not already running. This is typically performed using the command `rarpd -a`
4. Restart the AXIS 700 to download the IP address. You can perform a restart remotely via the AXIS 700 web interface. See "*Specifying System Settings*" on page 46.

Using BOOTP in UNIX

Follow these steps to download the IP address using the BOOTP method:

1. Append the following entry to your boot table. This is typically performed by editing the file `/etc/bootptab`.

```
<host name>:ht=<hardware type>:vm=<vendor magic>:\
:ha=<hardware address>:ip=<IP address>:\
:sm=<subnet mask>:gw=<gateway field>
```

where:

ht	ether for Ethernet
vm	rfc1048
ha	The Ethernet or node address, i.e. the AXIS 700 serial number
ip	The IP address of the AXIS 700
sm	The subnet mask
gw	The default router address

Example:

```
spserv:ht=ether:vm=rfc1048:\
:ha=00408c24c01c:ip=172.16.253.80:\
:sm=255.255.0.0:gw=172.16.253.254
```

2. If necessary, update your host table and alias name databases as required by your system.
3. Start the BOOTP daemon, if it is not already running. This is typically performed using the command `bootpd -a`
4. Restart the AXIS 700 to download the IP address, default router address and subnet mask. You can perform a restart remotely via the AXIS 700 web interface. See “*Specifying System Settings*” on page 46.

Verifying the Installation

Upon successful installation, the AXIS 700 will identify the attached scanning device and display the name of the detected unit. If the scanning device is not supported, an error message will be displayed.

If no destinations have been specified yet, the AXIS 700 will display:

```
Connect using
Web browser
```

If one or more destinations have already been specified, the AXIS 700 will display:

```
Send to:
xxxxxx
```

where “xxxxxx” is the first destination in the destination list.

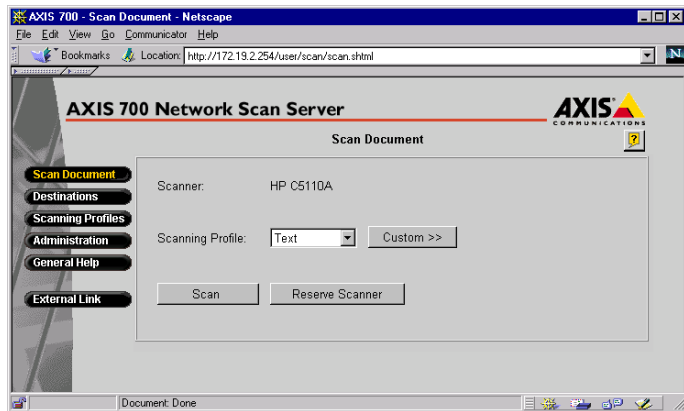
To verify the communication, you can access the AXIS 700 using a standard Web browser such as Netscape Navigator or Internet Explorer:

1. Place a document in the scanning device.
2. Start your Web browser.
3. Enter the name or IP address of your AXIS 700 in the location/address field and press Enter.

Example:

```
http://172.19.2.254
```

4. The AXIS 700 Home Page, the **Scan Document** page, is displayed. Click **Scan**. Depending on the image format specified by the profile, the Web browser will display the image in an associated image viewer or ask you to save the file.



Section 3 Configuring the AXIS 700

This section describes how to configure the AXIS 700.

Before the AXIS 700 can be used for distributing documents, you must specify these settings:


- **Network protocol settings**
- **Destinations** - E-mail addresses and file directories

Optionally, you can also modify these settings. However, when installing the AXIS 700 for the first time, you can simply keep the defaults.

- **System settings** - System information, Administrator password, language, user privileges etc.
- **Profiles**
- **Paper sizes**

You can configure the AXIS 700 from a standard Web browser such as Netscape Navigator or Internet Explorer. Alternatively, you can edit the configuration file using a text editor and upload the file to the AXIS 700 using FTP.

To access the AXIS 700 configuration file, you must first set the IP address as described in “*Assigning an IP Address*” on page 17.

Note: ☐ Online help  is available on every page within the AXIS 700 web interface. The help system is stored internally in the AXIS 700.

Accessing the Administration Pages

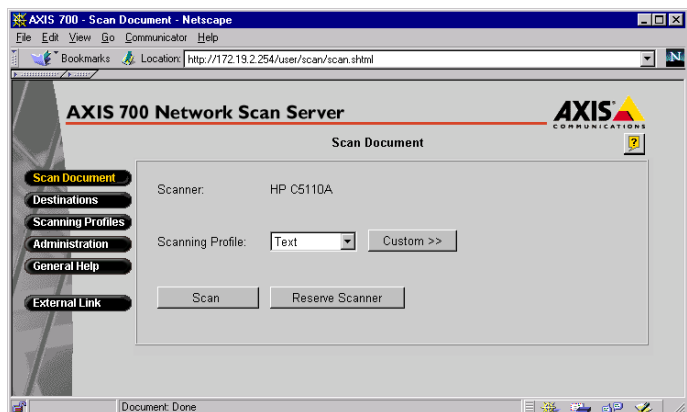
You can access the AXIS 700 Home Page using a standard Web browser such as Netscape Navigator or Internet Explorer.

1. Start the Web browser.
2. Enter the name or IP address of the AXIS 700 on the location/address line:

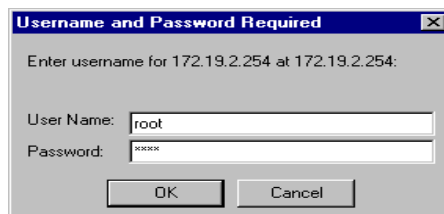
Example

`http://172.19.2.254`

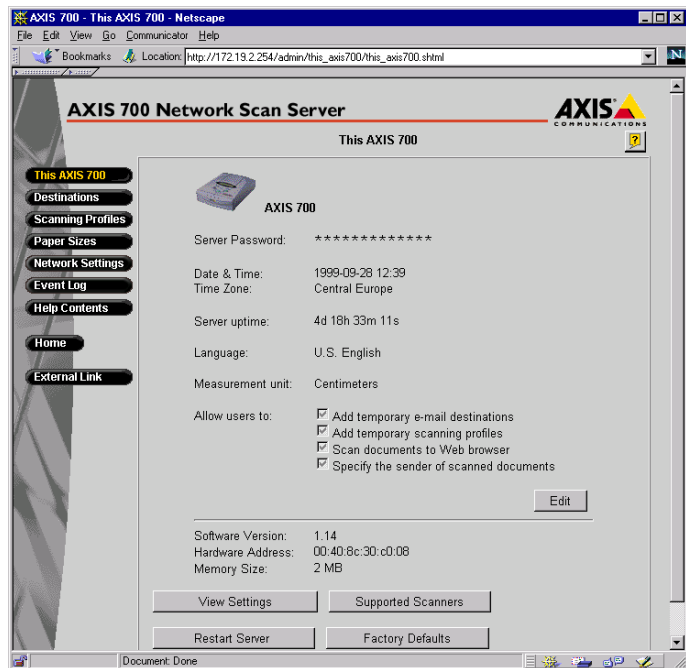
3. This brings you to the AXIS 700 Home Page.



4. Click Administration.



You will be prompted to enter the Server password when entering for the first time during a session. The default password is `pass`. This page is displayed:

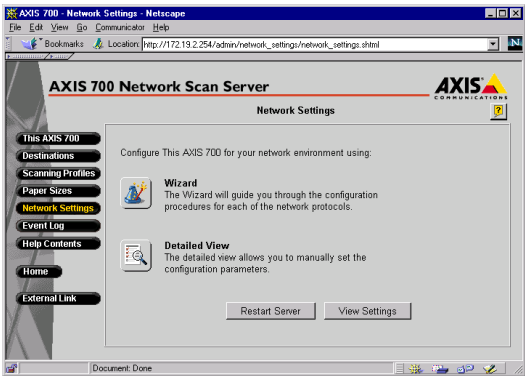


5. From this page you can access the Administration tools:
 - **This AXIS 700** - specifying system settings
 - **Destinations** - setting up e-mail addresses and file directories
 - **Scanning Profiles** - setting up profiles
 - **Paper Sizes** - specifying paper sizes
 - **Network Settings** - specifying the parameters for the network protocols used, defining external links
 - **Event Log** - lists the latest events in the AXIS 700, e.g. error messages


Specifying Network Settings

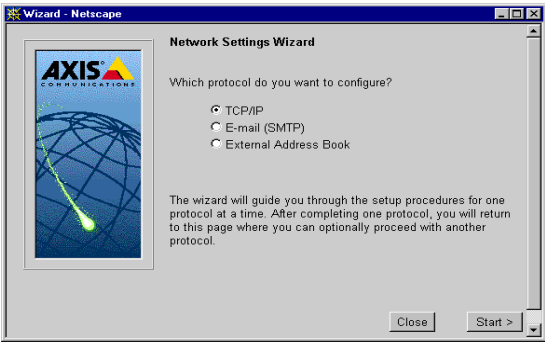
You must set up the AXIS 700 for all the network protocols that you intend to use.

Click **Network Settings**.



Wizard

Click **Wizard**  to enter a configuration wizard that guides you through the configuration procedures for each protocol. This is a convenient way to set up your AXIS 700 in your network environment.




TCP/IP Select **TCP/IP** and click **Start** to assign IP addresses.

Mail (SMTP) Select **Mail (SMTP)** and click **Start** to specify the mail server that provides your e-mail facilities.

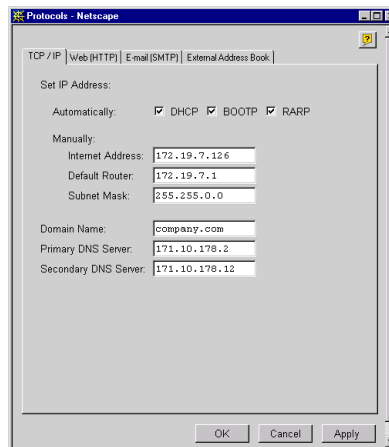
Note: ☐ Reply address is empty as default but should be set to a valid address as some mailservers do not accept an empty reply address.

External Address Book Select **External Address Book** and click **Start** to specify a source for external addresses. You can retrieve external e-mail addresses from an LDAP server, or external e-mail destinations and file destinations from a server-based address book stored as a file. The external e-mail addresses will appear in alphabetical order together with existing destinations in the destination list on the AXIS 700 control panel display.

Detailed View

Click **Detailed View**  to verify the settings and edit the configuration parameters. Online help is available for all parameters.

TCP/IP Select **TCP/IP** to set the TCP/IP.



From this page you have the following possibilities:

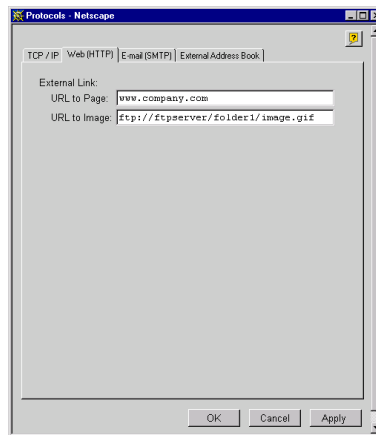
- **Set IP Address Automatically** - Check the methods you want to use for automatically downloading the IP address at start-up. Depending on how your network has been configured, other Internet-related parameters such as the default router, subnet mask, mail server, time server etc. might also be set automatically. However, we recommend that you verify the settings when the AXIS 700 has been restarted and then enter any missing parameters manually. **DHCP** (Dynamic Host Configuration Protocol) allow automatic but temporary assignment of IP addresses from a central pool, **BOOTP** (Boot Protocol) downloads the IP address to each device automatically. It operates on the entire network and **RARP** (Reverse Address Resolution Protocol) downloads the IP address to each device automatically. It operates within a single network segment only.
- **IP Address** - Specify the IP address of your AXIS 700, e.g. 172.19.2.254. You should acquire a unique and unused address from the Network Administrator in order to prevent conflicts with other network devices.

- Notes:**
- ☐ If the IP address is changed, you must re-establish the HTTP communication using the new IP address.
 - ☐ If DHCP, BOOTP or RARP is enabled, your manual settings might be overridden when you restart the AXIS 700.
 - ☐ You can also set the IP address from the AXIS 700 control panel, see *the AXIS 700 User's Guide*.
 - **Default Router** - Specify the IP address for the default router. The setting 0.0.0.0 indicates that no default router is used.
 - **Subnet Mask** - Specify the subnet mask used for determining when the traffic should be sent via a router. The setting 0.0.0.0 indicates that automatic router sensing is used.
 - **Domain Name** - Specify the name of the domain to which the AXIS 700 belongs. Domain refers to a set of computers on a network that have been assigned a group name.

- **Primary DNS Server** - Specify the IP address of the primary DNS (Domain Name System) server. DNS servers are used for identifying computers with names instead of IP addresses.
- **Secondary DNS Server** - Specify the IP address of the secondary DNS server that will be used in case the primary DNS server is disconnected or unavailable.

Click **OK** to save your changes and close the dialog box, **Cancel** to close the dialog box without saving your changes or **Apply** to save your changes without closing the dialog box.

Web (HTTP) Select **Web (HTTP)** to add a customized link to the AXIS 700 Home Page.

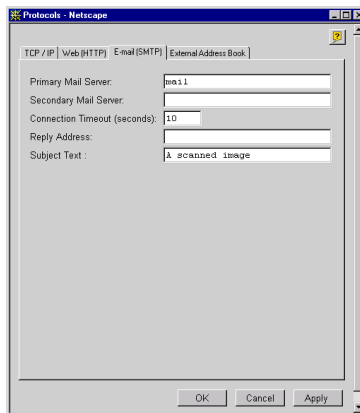


- **External Link** - You can add a customized link on the AXIS 700 Home Page. This could be useful e.g. if you want to set up guidelines or rules for your organization on how to use the AXIS 700.

URL to Page - Specify the full path to the page, e.g.
http://www.company.com.

URL to Image - Optionally specify a link to an image to be used as a button for the customized link. Specify the full path, e.g. *http://www.company.com/images/image.gif*, or the path relative to the URL of the page, e.g. *images/image.gif*. The width of the image must not exceed 117 pixels. Leave blank to use a standard button.

E-mail (SMTP) Select **E-mail (SMTP)** to set E-mail.



From this page you can set the following parameters:

- **Primary Mail Server** - Specify the name or IP address of the SMTP mail server that provides the e-mail facilities, e.g. mail or mail.domain.com or 172.19.2.254.
- **Secondary Mail Server** - Optionally specify the name or IP address of the secondary mail server. The secondary mail server will be used in case the primary mail server is disconnected.
- **Connection Timeout** - Specifies how long to wait before timing out when connecting to the SMTP server. This cannot be fewer than 5 and no more than 65535 seconds. If the first mail server is not answering within the timeout time, the secondary will be connected.
- **Reply Address** - Specify the e-mail address of the person responsible for the administration of the AXIS 700. This address will be used as the sender when sending to e-mail destinations, unless the user specifies another sender at the moment of scanning.
- **Subject Text** - Specify the text that will be used in the subject field when sending to e-mail destinations. Only U.S. ASCII characters are valid

External Address Book

Select **External Address Book** to set the External Address Book.

Your options here are:

- **No External Address Book** - Select this option if you do not want to retrieve an External Address Book.
- **External Address Book via LDAP** (e-mail destinations only) - Select this option to retrieve an external address book from an LDAP (Lightweight Directory Access Protocol) server. For more information on LDAP, see “*LDAP*” on page 77. Check the AXIS 700 Support Web for more information on the settings for your specific LDAP server.

LDAP Server - Specify the name or IP address of the LDAP server.

Port Number - Specify the number of the TCP/IP port.

User - Specify the name for logging on to the LDAP server, e.g. *cn=name, o=companyname, c=countrycode*. If left blank, no authorization will be attempted. If the contents in this field does not include a “=” or a comma, the string “*cn=*” is automatically added to the beginning of the contents.

Password - Specify the password for logging on to the LDAP server. If the User field is left blank, this setting will be ignored.

Confirm - Confirm the password to make sure it was spelled correctly.

Name Field - Specify the name of the field that contains the destination name.

E-mail Field - Specify the name of the field that contains the e-mail address.

Search Base - Specify where to begin the search, e.g.

o=companyname,

c=countrycode.

Filter - Specify an LDAP filter in order to reduce the length of the destination list. The filter can be a real LDAP filter, e.g.

(givenName=*). You can also specify a list of conditions, e.g.

mail=adm,telephoneNumber=+1 800**. In this case, the AXIS 700 will generate a real LDAP filter.

- **External Address Book from a File** (e-mail and file destinations) - Select this option to read an external address book from a file on an FTP server.

FTP Server - Specify the name or IP address of the FTP server.

User - Specify the user name for logging on to the FTP server. If left blank, the User and Password specified on the Destination Defaults page will be used.

Password - Specify the password for logging on to the FTP server. If the User field is left blank, this setting will be ignored.

Confirm - Confirm the password to make sure it was spelled correctly.

Directory - Specify the directory on the FTP server where the file is stored. If left blank, the root directory on the FTP server will be used.

File Name - Specify the name of the file. The file must be a text file using the following syntax:

[Destination-<destination name>]

Description	=<destination name>
Transfer method	=Scan-to-e-mail (SMTP)/ Scan-to-URL (SMTP & FTP)/ Scan-to-file (FTP)
Destination	=<e-mail address>/<directory>
Information level	=Nothing/Basic/Complete
Profile	=<scanning profile>
Server	=<ftp server>
User	=<user name>
Password	=<password>
File name	=<file name>
Index file	=Yes/No

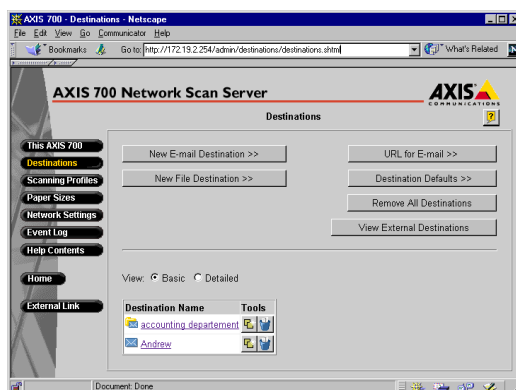
The last five fields only apply to file destinations. The Description, Transfer method and Destination fields are mandatory for all destination types. For FTP destinations, the Server field is mandatory as well. If the other fields are omitted, default values will be used. These are defined on the **Destination Default** page.

- Note:** ☐ The configuration parameters are described in “*The Parameter List*” on page 83.

Specifying Destinations


Destinations are used when sending images from the AXIS 700 control panel. A destination can be an e-mail address or a file on an FTP server.


From within the Administration pages, click **Destinations**.



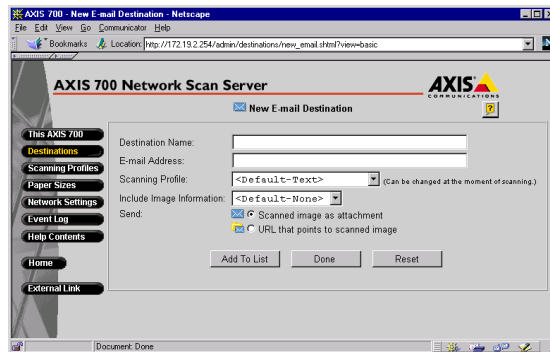
- The previously added e-mail and file destinations are listed in the table. Click **Detailed** to view the detailed settings.
- Click a link in the Destination Name list to edit the destination.

Note: ☐ The Destination Name is the text that will appear in the destination list on the AXIS 700 control panel.


- If you permit users to add temporary e-mail destinations, the five most recently added ones will appear at the top of the table. You can make these temporary destinations permanent by clicking **Make Permanent** .
- To change the default settings for destinations, e.g. the default profile, click **Destination Defaults >>**.
- To delete all destinations, click **Remove All Destinations**.
- Press **View External Destinations** to get the description, transfer method and destination of the external LDAP or file server destinations.

E-mail Destinations E-mail destinations  allow the users to send scanned images to e-mail addresses using the SMTP protocol.

1. Click **New E-mail Destination** >> to define a new e-mail destination.



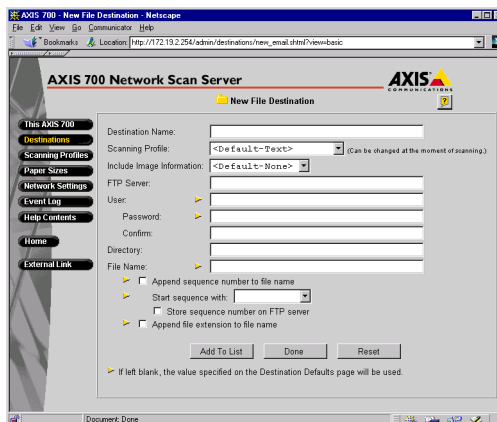
The e-mail can include the scanned image as:

- an e-mail attachment, or
 - a hyperlink (URL) to the original file
2. If you are using e-mail URLs , you must specify the location for storing the scanned images. Click **Destinations** and **URL for E-mail** >> to specify the directory where all such images will be stored.

- Notes:**
- ☐ You can enter more than one e-mail address. Separate the different entries with comma (,) e.g. *user1@company.com, user2@company.com*
 - ☐ You can also include a list of external e-mail addresses. See “*External Address Book*” on page 33.
 - ☐ Fax Servers that have e-mail gateways can also be used as destinations. For more information, see the support pages at *www.axis.com*.

File Destinations File destinations  allow the users to store scanned images in a directory on a file server using the FTP protocol.

Click **New File Destination >>** to define a new file destination.



The following information needs to be specified:

- If you have a series of image files, you can append a unique sequence number to the file name. A new image file will then be stored each time someone sends to the specified destination.

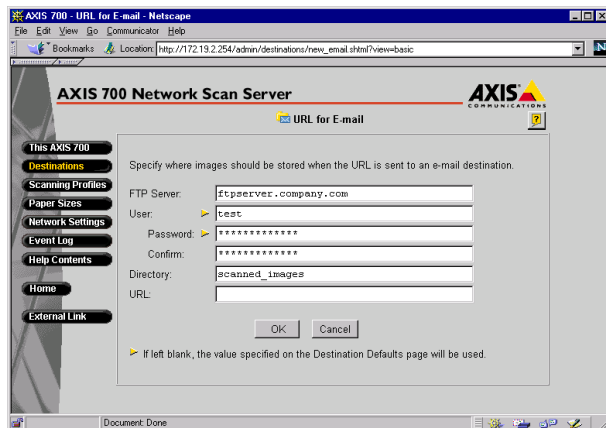
For example, if you select 01 as the sequence number from the drop-down list, the first time you send an image to the specified destination, the file will be saved as `filename01`. Next time the file will be saved as `filename02` etc.

For a directory with many files, performance will increase if you store the sequence number on the FTP server. However, to do that, the AXIS 700 must be permitted to overwrite/delete files in the specified directory.

- You can add the file extension to the file name, i.e. `tif`, `jpg`, or `pdf`. The file extension is needed for automatically launching the appropriate image viewer.

URL for Email The URL for Email page specifies where images should be stored when the URL is sent to an e-mail destination.

Click **URL for Email >>** to identify the FTP server where the image will be stored.

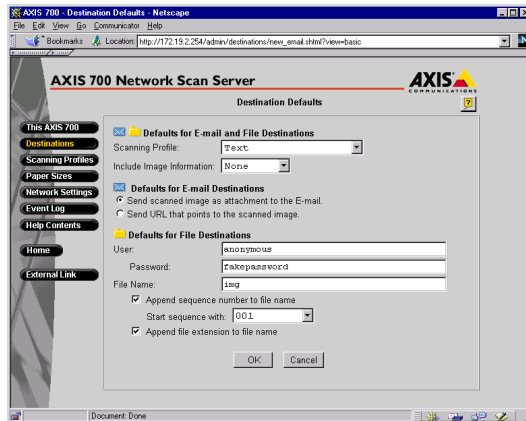


In order to complete the task you must enter the correct information in the text fields:

- Enter the name or IP address of the FTP server in the **FTP Server** field.
- If required, you must specify a user name and password for logging in to the FTP server. Enter your user name in the **User** field and enter the password in the **Password** field. Confirm the password by typing it in the **Confirm** field.
- In the **Directory** field, specify the directory on the FTP server where the image will be stored.
- Optionally specify an external **URL** to the specified directory, e.g. *http://www.company.com/documents/filename* or *ftp://ftp.company.com/documents/*. The directory path depends on how the web server has been setup. If left blank, the URL will be constructed from the other fields using the following syntax *ftp://user@ftpserver/directory/filename*, or *ftp://ftpserver/directory/filename* if the value of user is "ftp" or "anonymous".

Destination Defaults The Destination Defaults page allows you to specify default values for destination specific parameters, like used profiles and file server login information.

Click **Destination Defaults >>** to change the default values:



In order to complete the task you must enter the correct information in the text fields:

- Defaults for E-mail and File Destinations**
 Select the default **Scanning Profile** to use. You can specify another profile from the control panel at the moment of scanning.
 Select the amount of image information to be included in the image description by selecting one of the options from the **Include Image Information** dropdown list.
- Defaults for E-mail Destinations**
 Select the default transfer type for e-mail based destinations. The scanned image can either be attached to the e-mail, or stored on an FTP server in which case the URL to the location is sent in the e-mail.
- Defaults for file Destinations**
 Enter the name or IP address of the FTP server in the **FTP Server** field.

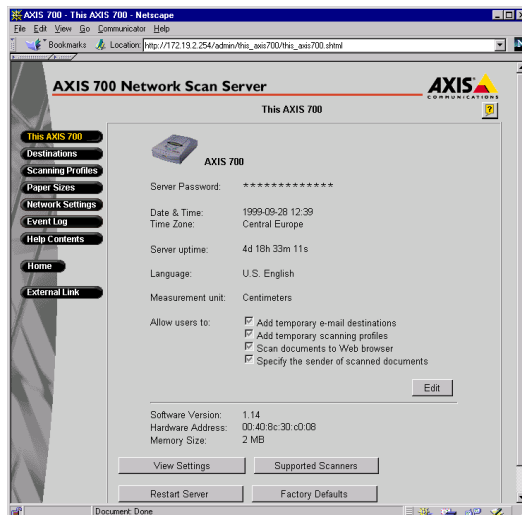
If required, you must specify a user name and password for logging in to the FTP server. Enter your user name in the **User** field and enter the password in the **Password** field.

In the **File Name** field, specify the name of the scanned image. on the FTP server where the image will be stored. The file name can optionally be combined with a sequence number and a file extension using the following syntax

<filename><sequencenumber>.<fileextension>, e.g.
image001.tif.

Specifying System Settings

Click **This AXIS 700** to display general system information.



From this page, you can click:

- **Edit** to change any of the system settings
- **View Settings** to list the current configuration settings
- **Supported Scanners** to get a list of digital copiers and scanners that are supported by AXIS 700
- **Restart Server** to perform a restart
- **Factory Defaults** to restore the factory default settings

General Here you can change the Server Password and Time Synchronization:

- It is recommended that you set a Server password to protect the system settings. For example, you will be prompted for the password when logging in for administration via HTTP or FTP. The default password is `pass`.

- Note:** ☐ If you lose the Server password, you must restore the factory default settings. See “*Restoring Factory Default Settings*” on page 69.
- To obtain date and time information from a time synchronization source, specify an NTP server. Time stamps are used in the event log and in Included Image Information.

User Options Specify what tasks the users are permitted to perform:

- Add temporary e-mail destinations
- Add temporary profiles
- View documents in Web browser
- Specify the sender of scanned documents

- Note:** ☐ All the tasks, except specifying the sender, are enabled by default.

International Specify country specific settings to customize the interface of the AXIS 700:

- Select the language to be used on the AXIS 700 message display.
- Select which measurement units are to be used when displaying the list of defined paper sizes.

Specifying Profiles

A profile is a combination of scanning device and image parameters used when scanning. The profile is optionally part of the destination definition. However, the user can override that setting by choosing another profile from the AXIS 700 control panel at the moment of scanning.

The AXIS 700 can generate files in standard TIFF, JPEG and PDF format.

Note: ☐ These files are merely images that do not include searchable text.

The AXIS 700 comes pre-installed with 8 standard profiles to cover most needs. This table lists the predefined profiles:

Name	Resolution	Type	Image format
Color high	150	24-bit color	JIFF/JPEG
Color low	75	24-bit color	JIFF/JPEG
Gray high	150	4-bit grayscale	TIFF/Packbits
Gray low	75	4-bit grayscale	TIFF/Packbits
Text	300	Black/white	TIFF/CCITT G.4
Text high	600	Black/white	TIFF/CCITT G.4
Text low	200	Black/white	TIFF/CCITT G.4
Text/Photo	300	dithered	TIFF/CCITT G.4


You can edit these profiles or create new ones to specific document types such as invoices, mailings etc.

Click **Scanning Profiles** to create and edit the profiles.

- The previously added profiles are listed in the table. Click a link in the Profile Name list to edit an existing profile.

Note: ☐ The Profile Name is the text that appears in the profile list on the AXIS 700 interface.

- Click **New Profile >>** to add a new profile to the list.

- If you permit the users to add temporary profiles, the five most recently added ones will appear in the list. You can make temporary profiles permanent by clicking **Make Permanent** .
- To change the default profile settings, e.g. the paper size, click **Profile Defaults >>** and change the settings.
- To make sure that all pages are in upright position when scanned double sided, click **PDF Options >>** and change the settings.
- If you need to restore the predefined profiles, click **Restore Predefined Profiles**. Note that all your current profiles will be lost.

Note: ☐ Not all combinations of settings are possible. If you try to use a combination that is not valid, the AXIS 700 will display an error message.

Apart from the predefined profiles above we also recommend two profiles which generate PDF documents. The first recommended profile is for text documents. To create this profile, copy the Text profile and then change the Format-Compression field to PDF-CCITT G.4. The second recommended profile is a color profile suited for pictures and mixed text/pictures. Copy the Color high profile and change the Format-Compression field to PDF-JPEG.

Specifying Paper Sizes

Paper sizes define the size of the scanned image and are optionally part of the profile. However, the user can override that setting by choosing another paper size from the AXIS 700 interface at the moment of scanning.

The AXIS 700 includes 12 predefined standard paper sizes to cover most needs. This table lists the predefined paper sizes:

Name	Width	Length
A3	11.69"	16.54"
A4	8.27"	11.69"
A5	5.83"	8.27"
B4	9.84"	13.90"
B4 (JIS)	10.12"	14.33"
B5	6.93"	9.84"
B5 (JIS)	7.17"	10.12"
Business Card	2.17"	3.74"
Executive	7.25"	10.5"
Ledger	11"	17"
Legal	8.5"	14"
Letter	8.5"	11"
Photo 3.5" x 5"	3.5"	5"
Photo 4" x 6"	4"	6"

Optionally, you can edit these paper sizes or create new ones to suit your specific needs.

Click **Paper Sizes** to specify paper sizes.

- To edit a paper size in the list, click a link from the Paper Size Name list. To create a new paper size, click **New Paper Size >>**.
- If you need to restore the predefined paper sizes, click **Restore Predefined Paper Sizes**. Note that all your current paper sizes will be lost.

Configuring using FTP

The AXIS 700 configuration file includes all the system parameter settings regarding network protocols, profiles, paper sizes and destinations.

Follow these instructions to edit the configuration file using FTP:

- Caution!** ☐ Windows 95/98 has a directory called 'config' that contains important system files. It is important to change to another directory using the `cd` command before modifying your AXIS 700 configuration file from within a Windows 95/98 environment. Failure to do this may result in some of your system files to be overwritten.
1. In a DOS or UNIX window, type `ftp <IP address>`, where `<IP address>` is the name or IP address of your AXIS 700.
 2. Login using the user id `root` and the password `pass` (or the new one you have set).
 3. Type `get config.ini` to download the configuration file to your current directory.
 4. Edit the file using your preferred text editor. In Windows 95/98 and Windows NT environments, you can for example use Notepad.
- Caution!** ☐ Do not use MS Word or similar word processor.
5. Type `put config.ini` to download the file to the AXIS 700 and save it permanently.
 6. To exit FTP, type the command `quit`, `bye`, or `exit`.
- Notes:** ☐ The configuration file can be used as a template when configuring multiple Network Scan Servers.
- ☐ It is sufficient to download the configuration parameters that have changed. The other parameter settings will remain unchanged.
- ☐ Internet-related parameter settings cannot be changed using FTP.

Section 4 Using the AXIS 700

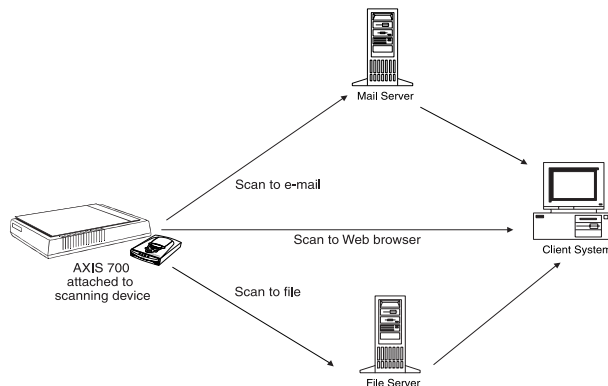
This section includes the following information:

- Scanning methods
- Scanning to destinations
- Scanning multiple pages
- Adding temporary destinations and profiles
- Scanning parameters
- Scanning to the Web browser
- Viewing image files

Scanning Methods

The AXIS 700 supports four methods for distributing digital documents over the network:

- Scanning to an e-mail destination
- Scanning to a file destination
- Scanning to a Web browser
- Scanning to URL (scan to e-mail and scan to FTP)



You can use any or all of these methods, depending on your specific needs.

Destinations Scanning to destinations, i.e. e-mail and file destinations, is performed directly via the AXIS 700 control panel. This is typically how the AXIS 700 will be used. However, the Administrator must first set up the destinations from the Web browser interface.

E-mail Scanning to e-mail allows sending scanned images as e-mails to anyone defined in the destination list. It makes it easy to forward image files to yourself and others. This method is what is now de facto called Internet faxing.

The e-mail transfer uses the Simple Mail Transfer Protocol (SMTP). The image is MIME-encoded and will be sent as an e-mail attachment.

If an application, e.g. an image viewer, has been associated with the image type, double-clicking on the e-mail attachment starts the appropriate application.

File Scanning to file means that the scanned images are stored on a network storage device. This could be on a server, a client with a shared drive, a mainframe, or whatever device is accessible via the network as a file system. The distribution of the image files is achieved using the File Transfer Protocol (FTP). FTP potentially enables storing of files over the Internet.

You will typically scan to a file when specific software, e.g. groupware, document management and workflow systems, takes care of the scanned information.

All users can have a directory of their own on the FTP server to which they can send scanned information. In operating systems like Windows 95/98 and Windows NT, shortcuts to the directories where images are stored can be placed on the user's desktop. This gives easy access to the scanned information.

You can also print scanned images directly from a network printer by sending the scanned image to a network print server. To do this, the print server must support FTP and include a TIFF module. Refer to the AXIS 700 Support Web for more information.

Web Browser Scanning to a Web browser is a convenient method for users that infrequently send information or users that do not have an e-mail address. It is also useful if you want to try a number of scanning profiles.

You place the document in the scanning device and access the AXIS 700 from a standard Web browser. You can then trigger it directly from the Web browser and save the image within the Web browser dialog. Depending on the image format used, the Web browser will display the image in an associated viewer or ask you to save the file.

Data is sent directly between the AXIS 700 and the user, i.e. peer-to-peer. This results in minimum network load, and normally no data will be sent over the backbone of the network.

Scan to URL Scanning to URL (Uniform Resource Locator) is a combination of scan-to-e-mail and scan-to-file, where images/documents are stored on a file server. The recipient will receive an e-mail containing the URL (Web link) to the file, instead of an e-mail attachment. This off-loads the mail server from handling large attachments.

Scanning to Destinations

- Note:** ☐ Before scanning to an e-mail address or a file, the Administrator must have set up the destinations as described in “*Specifying Destinations*” on page 40.

Perform these instructions from the AXIS 700 control panel:

1. The AXIS 700 display shows “Send to: xxxxxx” when it is ready for use. For example:

Send to:
Accounting Dept

2. Use to scroll through the destination list, until you find the desired destination. Press and hold the key to autorepeat the scrolling. If needed, you can add e-mail destinations temporarily. See “*Adding Temporary Destinations*” on page 59.
3. If you want to send the image to more than one destination, press Enter to select each destination:

Send to: ✓
Accounting Dept

4. Repeat steps 2 and 3, until all desired destinations are selected.


- Note:** ☐ Be careful not to transmit images to an unwanted destination. The scanned image will always be sent to the destination currently shown in the display, whether explicitly selected or not.

5. Optionally, press Menu to change the default settings for scanning parameters. You can select temporary settings for profile, paper size and double-sided. Use to select the desired value.




- Note:** ☐ Press Cancel to reset all temporary settings to the default values.

6. Insert a single page on the flatbed or a stack of paper into the sheet feeder of the attached scanning device.

One single page or a stack of paper in the sheet feeder:


- a. Press Send  to scan and send the image to the destination in one step.

Several separate pages or stacks of papers:

- a. Press Scan  to scan each page.
- b. Insert the next page and press Scan  again. Repeat the procedure until all the pages have been scanned.
- c. Press Send  to transmit the image to the destination.

During the scanning this message appears on the display:


```
Scanning #1
Please wait
```

7. When you have pressed Send  and the transfer of the scanned image is completed, the AXIS 700 is released for other users to access.

- Notes:**
- ☐ By scanning multiple pages, you can accumulate several pages into one image file. See “*Multipage Image Files*” on page 57.
 - ☐ If no operations are performed within one minute of allocation, the AXIS 700 will return to its default settings.
 - ☐ The AXIS 700 keeps all temporary settings in memory for one minute after the last scanning job, and then returns to its default settings.

Multipage Image Files

When scanning multiple pages, you can accumulate all the pages in one image file. This applies to the TIFF and PDF formats only. To utilize this feature, you must use a profile with the Multipage Documents parameter set to All pages in one file. This is the default setting.

- Notes:**
- ☐ The JPEG format always sends each page as one separate image file.
 - ☐ Not all TIFF viewers support multipage image files. In that case, you must use a profile with the Multipage Documents parameter set to Separate file for each page, or use Send  to scan each page.
 - ☐ Double-sided is only available if the scanning device supports duplexing.

Job Separation Sheets The AXIS 700 supports the job separation sheets that can be used with the Canon DR-3020 scanner. A job separation sheet inserted in a stack of paper will divide the scanning job into separate image files. Other separation pages will be ignored.

Paper orientation on digital copiers To receive an upright image, the setting should be “Portrait” and the paper should be placed with the short-edge in the ADF (Automatic Document Feeder) or in the A4-R position on the flatbed inside the digital copier. This is true for all the supported digital copiers except Sharp AR-series.

- Notes:**
- ☐ Setting the PDF Options parameter enables you to insert the document in the same orientation as you do when you copy, i.e. with the long edge first. Click **Scanning Profiles** and **PDF Options >>** in order to set the parameter. This option only affect scanned documents in PDF output format. TIFF or JFIF format documents are not affected. All PDF profiles are affected and cannot be changed at the moment of scanning.
 - ☐ Before using the AXIS 700, you must exit the power save mode on some digital copiers. This is done by pressing the **On/Off** button on the copier.
 - ☐ Before scanning some copiers must be set in “scan” mode. For Canon machines you do that by pressing the **SYSTEM** button and then choose **SCSI** and the **ONLINE** position. For Ricoh Aficio 401 machines the scan mode is set by pushing the **SHARE MODE** button and then choosing **SCANNER**.

Adding Temporary Destinations

If you want to send a scanned document to an e-mail destination that does not appear in the destination list on the AXIS 700 display, you can add it temporarily from the Web browser interface.

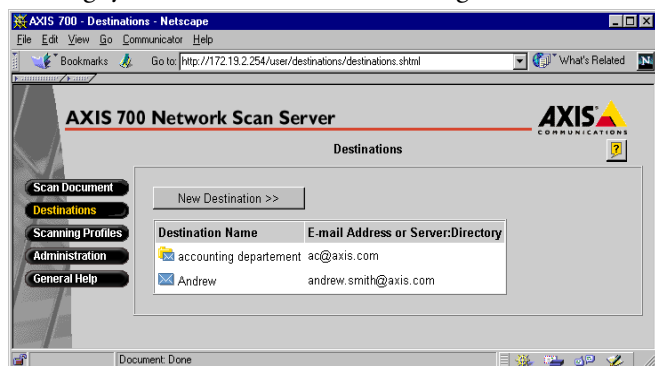
Note: ☐ The Administrator might not allow users to add temporary e-mail destinations.

1. Start the Web browser.
2. Enter the name IP address of your AXIS 700 on the location/address line:

Example

http://172.19.2.254

3. This brings you to the AXIS 700 Home Page. Click **Destinations**.



4. The table lists the available destinations. Click **New Destination >>** and specify the settings for the new destination.
5. Click **OK** to save the destination temporarily. Note that only the five most-recently added temporary destinations will appear in the destination list. Contact your Administrator if you want to add a destination permanently.

- Note:** ☐ All temporary destinations are erased when the AXIS 700 is shut down or re-started.

Adding Temporary Profiles

If you have tried all the available profiles and are still not satisfied with the result, you can add a temporary profile from the Web browser interface.

- Note:** ☐ The Administrator might not allow users to add temporary profiles.

1. Start the Web browser.
2. Enter the name or IP address of your AXIS 700 on the location/address line:

Example

`http://172.19.2.254`




3. This brings you to the AXIS 700 Home Page. Click **Scanning Profiles**.
4. The table lists the available profiles. Click **New Profile** and specify your settings. If you place a document in the scanning device, you can click **Scan** to monitor the results.
5. Click **OK** to save the profile temporarily. Contact your Administrator if you want to add a profile permanently.

- Notes:** ☐ Only the five most-recently added temporary profiles will appear in the list.
- ☐ All temporary profiles are erased when the AXIS 700 is shut down or re-started.

Scanning Parameters

For each scanning job, you can specify these parameters:

- Profile
- Paper size
- Double-sided

From the AXIS 700 control panel, you press Menu  to scroll through the menu. Use   to find the desired value.

Note: ☐ If you do not specify anything, the default settings will be used.

Profile

The AXIS 700 comes pre-installed with 8 standard profiles designed to cover most needs. The profiles are maintained by the Administrator. If you have permission, you can define your own temporary profiles. See “*Adding Temporary Profiles*” on page 60.

Select a profile based on what is being scanned. Documents typically use one of the Text profiles. Pictures could use one of the Text/Photo, Gray or Color profiles.

Scanning color images to JPEG is more time consuming due to the amount of computation performed by the AXIS 700. Therefore, do not scan in higher resolution than needed, e.g. for web publishing of color images, “Color low” (75 dpi) should be sufficient.

The pre-defined Text profiles use the most efficient compression, CCITT G4, which minimizes the file size but affects performance. To get higher performance you can change the compression to CCITT G3, but then the file size will be larger.

If you intend to manipulate a color image using an image editor, it is recommended that you use uncompressed TIFF. Uncompressed TIFF may, however, generate very large files.

Apart from the predefined profiles below we also recommend two profiles which generate PDF documents. For recommended profiles, see “*Specifying Profiles*” on page 48.

- Note:** ☐ Depending on your scanning device, some profiles may not be valid or useful. For instance, color profiles are useless for black/white scanning devices, unless they can do gray-scale scanning.

This table outlines when to use the predefined profiles:

Name	Description
Color high	Color pictures with high demand for precision. Suitable for photos, presentation slides, clip art in documents etc. Not suitable for web publishing, since the image is larger than what the display will show. The JPEG format cannot generate multipage files. This profile can also be used in combination with non-color scanning devices. The generated image will be a gray-scale image, which is significantly smaller than it would be if you used the Gray high profile.
Color low	Color pictures suitable for web publishing, databases, clip art in documents etc. The JPEG format cannot generate multipage files.
Gray high	Black/white pictures, diagrams etc. which require more detail. Generates 16 shades of gray.
Gray low	Black/white pictures suitable for web publishing. Generates 16 shades of gray.
Text	Black/white documents intended for OCR, or documents containing small text. Suitable for most kind of document scanning. This is the default profile.
Text high	Black/white documents containing very small text. Excellent for OCR. If the scanning device does not support 600 dpi, its maximum resolution will be used instead.
Text low	Black/white documents not intended for OCR, or documents containing large text, e.g. invoices. Suitable when maximum scanning speed and minimum file size is required.
Text/Photo	Black/white documents with pictures. The pictures are dithered to create a rasterized effect. Especially good for faxing. Not suitable for OCR. As an alternative, try a grayscale profile.

- Notes:** ☐ The default profile is Text.
- ☐ You can select another profile to become the default profile by changing the appropriate parameters on the Destination Defaults page. You reach this page by clicking **Destinations** and **Destination Defaults >>**. After a factory default reset, however, the Text profile is yet again set to be the default profile.

Paper Sizes

The AXIS 700 comes pre-installed with 14 paper sizes designed to cover most needs. See the table page 50. The paper sizes are maintained by the Administrator.

- Notes:**
- ☐ The default paper size is Letter.
 - ☐ You can select another paper size to become the default paper size by changing the Paper Size parameter on the Profile Defaults page. You reach this page by clicking **Scanning Profiles** and **Profile Defaults >>**. After a factory default reset, however, the Letter paper size is yet again set to be the default paper size.

Double-sided

If supported by the attached scanning device, you can select Double-sided to scan both sides of a page simultaneously. This option is also known as *duplex* and may be referred to by that term in your scanning device documentation.

- Notes:**
- ☐ In the default mode, double-sided is turned off.
 - ☐ To enable double-sided scanning, you must edit the profile you want to use.

Scanning to the Web Browser

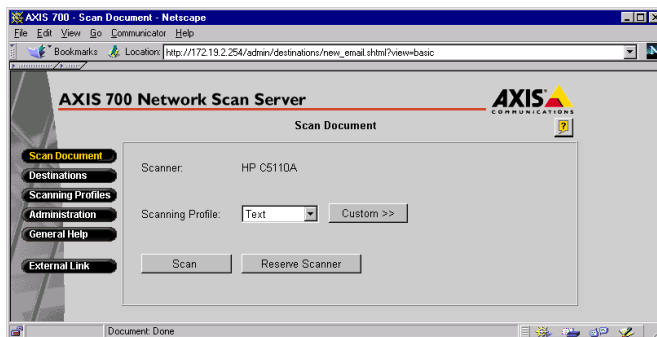
Follow these steps to send the scanned image to your Web browser:

1. Place the material in the scanning device.
2. Start the Web browser.
3. Enter the name or IP address of the AXIS 700 on the location/address line:

Example

`http://172.19.2.254`

4. This brings you to the AXIS 700 Home Page, the **Scan Document** page.




We recommend that you add the address as a bookmark, or as a link on the department or workgroup's Web page.




5. Optionally change the default scanning profile.
6. Click **Scan** and wait for the image to appear in your Web browser. Depending on the image format specified by the scanning profile, the Web browser will display the image in an associated viewer or ask you to save the file. For further processing, you must save the image from within the viewer as the Web browser will normally use a temporary file name.

7. If you are not satisfied with the result, you can try one of the other available profiles or set up a new one by clicking **Custom >>**.
8. If you have additional documents to scan, click **Reserve Scanner** to lock the unit for your own use and then complete the scanning from the AXIS 700 control panel.
9. Insert a single page on the flatbed or a stack of paper into the sheet-feeder of the attached scanning device.
10. At the AXIS 700 control panel, continue as follows:

One single page or a stack of paper in the sheet feeder:


- a. Press Send  to scan and transmit the image to your Web browser in one step.



Several separate pages:

- a. Press Scan  to scan each page.
- b. Insert the next page and press Scan  again. Repeat the procedure until all your pages are scanned.
- c. Press Send  to transmit the image to your Web browser.

During the scanning this message appears on the display:

```
Scanning #1
Please wait
```

11. When you have pressed Send  and the transfer of the scanned image is completed, the AXIS 700 is released for other users to access.

- Notes:**
- ☐ By scanning multiple pages, you can accumulate several pages into one image file. See “*Multipage Image Files*” on page 57.
 - ☐ You must press Scan  or Send  on the control panel within three minutes, otherwise the operation will end automatically.

Viewing Image Files

The AXIS 700 generates standard TIFF, PDF and JPEG images that are supported by most image-related applications. The AXIS 700 does not rely on any product-specific software installed on each client. Still, to be able to use the images created, you need tools for viewing and manipulating the images.

There are basically two different types of imaging tools:

- Tools optimized for image/picture editing
- Tools optimized for handling scanned documents

Tools for Image/Picture Editing

Tools for image/picture editing normally support JPEG and single-image uncompressed TIFF. They are optimized for handling color and gray-scale images. Such tools are delivered with the desktop scanners. Most tools will work, as long as JPEG and/or TIFF are supported.

Tools for Viewing, OCR and Archiving

Tools for viewing, OCR and archiving generally support multipage compressed TIFF, but often also JPEG. Document viewers are optimized for presenting document data in readable format on a screen. Often suitable tools are bundled with desktop scanners. Today, tools that combine viewing and simple archiving are becoming more popular. These tools are delivered with Windows 95/98 and Windows NT.

Acrobat Reader

The PDF format requires the Adobe Acrobat Reader. Acrobat Readers for Windows (3.1, 95/98, NT), Macintosh and UNIX can be downloaded free of charge from the Adobe Systems Web site <http://www.adobe.com>. The tool is also available on the AXIS Online CD.

- Notes:**
- ❑ When using the “Text” profiles for scanning documents, make sure that the viewing tool supports multipage CCITT G.4-compressed TIFF; this format is the most common standard for imaging and archiving scanned documents. If your application does not support multipage documents, you can create a profile that generates single page documents, or scan each page as a separate job.
 - ❑ When scanning pictures, e.g. for Web publishing, use “Color low” or “Color high” both of which create a JPEG file. The image files generated by these profiles are supported by basically all existing image editors and Web browsers.
 - ❑ Extensive testing of popular tools has been done to make sure that AXIS 700 is compatible with them. However, this does not guarantee compatibility with all existing tools. If you find tools that the AXIS 700 does not support, we would like to know about it. You find information about how to contact us in the Preface.
 - ❑ For further information, including recommendations for specific tools and sample images created by the AXIS 700, see the AXIS 700 Web site at http://www.axis.com/products/axis_700/

Associating Image Formats with Applications

Applications are typically associated with a file format automatically during the installation procedure. If not, it is recommended that you manually associate your image applications with the supported image file formats, so that double-clicking on an image icon launches the appropriate application.

In Windows 95/98 and NT, follow these steps to associate an application with a specific file format:

1. In Windows Explorer, click the **View** menu, click **Options**, and then click the **File Types** tab.
2. To create a new file type, click **New Type**. To modify the settings for an existing file type, click the type, and then click **Edit**.
3. Specify a description for the file type and the file name extension associated with this type of file.
4. Click **New** to define an action for this file type.
5. In the Action field, type `Open`. In the Application used to perform action field, specify the path to the application you want to use for opening files that have this extension.

Appendix A Troubleshooting

This appendix helps you to:

- Restore factory default settings to the AXIS 700
- Interpret the AXIS 700 front panel indicators
- Interpret the AXIS 700 error messages
- Display the log file

Restoring Factory Default Settings

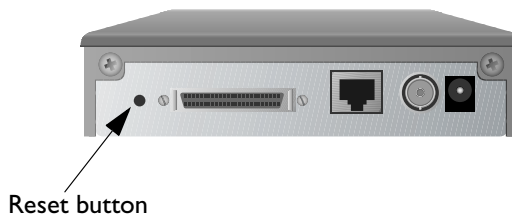
If required, you can restore the factory default settings to the AXIS 700. You can use one of these methods:

- Reset button
- Web browser
- FTP

Important! ☐ When you restore the factory default settings, all your current settings including the destinations and profiles will be lost. You will need to re-assign the IP address as described in “*Assigning an IP Address*” on page 17.

Reset Button Follow these steps to restore the default settings using the Reset button:

1. Turn off the AXIS 700.
2. Press and hold the Reset button while you switch on the AXIS 700. Keep the Reset button pressed until the Status, Busy and Network indicators flash at regular two second intervals.



3. Release the Reset button and wait at least two seconds (one flash of the indicators).
4. Press and hold the Reset button for at least five seconds until the Network indicator remains constantly lit.
5. The AXIS 700 is now reset to factory default settings.
6. Restart the AXIS 700 by turning it off and then back on again.

Web Browser Follow these steps to reset to the defaults settings from a Web browser:

1. Start the Web browser.
2. Enter the name or the IP address of the AXIS 700 in the location/address field. The AXIS 700 Home Page is displayed.
3. Click Administration.
4. Click This AXIS 700.
5. Click Factory Defaults.

The AXIS 700 will now restart with the factory default settings.

FTP Follow these steps to restore the default settings using FTP:

1. Log in to the AXIS 700 with the command `ftp <IP address>`, where `<IP address>` is the name or IP address assigned to your AXIS 700.
2. You will be prompted for user id and password. Use the user id `root`, which has the default password `pass` (`root` is the user id with the highest priority).
3. Issue the command `get defaults` to restore the default settings. The unit will then automatically restart.
4. Log out using the command `quit`, `bye` or `exit` depending on your FTP version.

The AXIS 700 will now restart with the factory default settings.

Front Panel Indicator Conditions

The Power LED is hardware controlled and should always remain on when power is connected to the AXIS 700. The remaining LEDs are all software controlled.

Normal Conditions

This table shows the front panel indicators during normal conditions:

Event	Status LED	Busy LED	Network LED	Remarks
Power up	On	On	On	Initial power to unit
	On	Off	Off	Memory test
	Flash	Off	Off	Self test in progress
	Off	Off	Flash	Network LED flashes when network traffic is present
Scanning	Off	On	Flash	
Idle	Off	Off	Flash	Network LED flashes when network traffic is present
Flash loading	Off	Blink	Blink	During Flash loading, the Network LED blinks quickly

Error Conditions

This table lists a summary of error conditions:

Event	Status LED	Busy LED	Network LED	Remarks
Power up	On	Off	Off	Check SCSI cable to scanning device
	Off	Off	Off	Check RJ45 cable to network
Idle	Off	Off	Off	Check RJ45 cable to network. If known network traffic, the Network LED should flash.
Error in EEPROM	Blink	Off	Off	Consult Network Administrator
Error in FLASH PROM	Flash	Off	Flash	Consult Network Administrator
Error in SRAM	Flash	Flash	Off	Consult Network Administrator
Error in DRAM/DIMM	Flash	Off	Off	Consult Network Administrator
DRAM/DIMM configuration error	Flash	Flash	Off	Consult Network Administrator
SW-HW combination error	Flash	Flash	Flash	Consult Network Administrator
Illegal serial no.	Flash	Flash	Flash	Consult Network Administrator
Flash load failed	Flash	Off	Off	Consult Network Administrator

Status Indicator On

If the Status indicator remains on after startup, this may indicate an error. Most likely, there is a problem with the scanning device communication. The message display will indicate possible error status.

Network Indicator Off

The Network indicator flashes when there is network traffic. If it remains off and you know there is network activity, check the network connection.

Error and Warning Messages

This table lists the error and warning messages that might appear on the AXIS 700 message display:

Message	Description
Scanner lamp failure	The lamp in the scanner is broken. See the scanner manual for instructions.
Scanner fuse blown	A fuse in the scanner is broken. See the scanner manual for instructions.
Scanner compression unit failure	The image compression unit in the scanner did not work properly. Contact your scanner supplier.
Scanner hardware failure	The scanner reports a hardware failure. Contact your scanner supplier.
Scanner firmware failure	The scanner reports a software failure. Contact your scanner supplier.
SCSI parameter length illegal	The length of the SCSI command is illegal. Contact your scanner supplier.
Invalid SCSI command	The scanner does not support the given SCSI command. Contact your scanner supplier.
Invalid field in SCSI CDB	The SCSI command includes an invalid field. Contact your scanner supplier.
SCSI command sequence illegal	The scanner cannot receive the SCSI commands in the order they were sent. Contact your scanner supplier.
Invalid field in SCSI parameter list	The SCSI parameter block includes one or several invalid fields. Contact your scanner supplier.
Scanner not ready, please check scanner and restart the scan server.	An error has occurred in the communication between the scanner and the AXIS 700. For example the copier might have been taken out of scan mode and does not respond to any commands. That is why the scanner should be checked and the AXIS 700 restarted.
A timeout has occurred on the scanner, the job has been canceled	The AXIS 700 has not had any communication with the scanner and the scanner has timed out. Scan the documents again.
Out of memory	The scanned image contains too much data. Please try another scanning profile. If required, you can expand the RAM memory as described on the AXIS 700 Support Web.
Out of scanner image memory	The internal store in the copier has been filled up. This can happen if you scan a document with many pages in the document feeder. When you press send, there is not enough internal memory to keep the pages. Please divide the pages and use the scan button instead. The whole document has to be re-scanned.

Message	Description
Unresolved name: <server name>	Cannot find the IP address mapped to <server name>.
Not available: <server address>	Cannot establish communication with the server specified in <server address>. Please try again later.
Login failed: <server address>	Incorrect FTP server password specified for the file destination.
Disconnected: <destination>	The connection to the destination specified in <destination> has been lost. The image transfer has been aborted.
Connection failed	Connection failed.
No valid mail recipient found	All the selected e-mail destinations were incorrect.
Illegal address <recipient>	Incorrect e-mail address specified for the e-mail destination.
Illegal directory on: <server address>	The directory specified for the file destination does not exist (no directory)
Unable to open file on	Default file name is missing (no file name, file name missing).
Write error on: <server address>	Insufficient access rights to the directory specified for the file destination.
No info file on: <server address>	The information file could not be stored on the FTP server. Possible reasons are lack of file space or naming conflicts. The image file will be removed.
Paper jam	Paper jam in the scanner. The scan job is terminated. Remove paper to continue scanning.
No paper in scanner	No paper in the sheetfeeder. Applies to scanners without a flatbed only.
Scanner warming up, please retry	The scanner lamp must reach the correct temperature and intensity.
Scanner not ready, please check scanner and retry	The scanner is busy. Please try again. If the error occurs repeatedly, contact your scanner supplier.
The ADF cover is open, please check and retry	The ADF cover is open, please check it and retry.
Could not connect to LDAP server	Could not connect to the LDAP server, (illegal LDAP server).
The user specified for LDAP is invalid	The user specified for LDAP is invalid (illegal LDAP user).
Invalid LDAP credentials (e.g. invalid user or password)	Invalid LDAP credentials (e.g. invalid user or password).







Message	Description
The search base specified for LDAP is invalid	The search base specified for LDAP is invalid.
Illegal LDAP filter specified.	The LDAP filter specified is illegal.
User and password is required to connect this LDAP server.	User and password is required to connect this LDAP server.
LDAP error! No destinations were retrieved.	LDAP error! No destinations were retrieved.
Missing mandatory FTP parameter for external address book.	A mandatory FTP parameter is missing for the external address book.
Scanner not connected	Please check the scanner connection and restart the AXIS 700.
Scanner not supported	The attached scanner is not supported. Scanning will not work. Attached scanner id is displayed in the event log.
Scanning failed	An error occurred during scanning. Please refer to earlier messages.
Device is busy	Please try again later.

Displaying the Log File

The AXIS 700 log file automatically logs all events and errors that have occurred since the last restart. You can access the log file using one of these methods:

- Control panel
- Web browser

Control Panel Follow these steps to display the log file from the control panel:

1. Press Menu  a few times, until you reach the **Advanced** menu.
2. Use   to find the **Server log** option.
3. Press Enter  to enter the submenu.
4. Use   to scroll through the messages.

Web Browser Follow these steps to display the log file from a Web browser:

1. Start the Web browser.
2. Enter the name or IP address of the AXIS 700 in the location/address field and press Enter:

Example

`http://172.19.2.254`

3. The AXIS 700 Home Page is displayed. Click **Administration**.
4. Click **Event Log**.

The event log is displayed.

Appendix B LDAP

This section gives you an introduction to LDAP and how to use it.

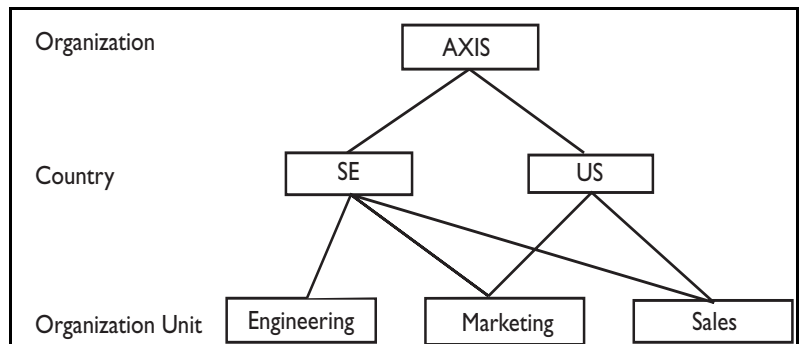
Introduction

LDAP (Lightweight Directory Access Protocol) is used to program directory-enabled applications. It is a directory service that allows people to locate other users, resources, services and information. LDAP allows resources and services to be selected with ease and accessed with location-independence.

Note: ☐ LDAP works differently depending on the organization and what the system looks like.

Structure Example

A structure can for example look like this:



Usual attribute types

These are the most typical attribute types (the LDAP server implementation should understand these attribute types):

Attribute Type	Matches
objectClass	Describes the kind of object which the entry represents.
cn	Contains the name of an object. If the object is a person, it is typically the person's full name.
sn	Contains the family name of a person.
c	Contains a two-letter country code.
l	Contains the name of a locality, such as a city, county or other geographic region.
st	Contains the full name of a state or province.
street	Contains the physical address of the object to which the entry corresponds, such as an address for package delivery.
o	Contains the name of an organization.
ou	Contains the name of an organization unit.
title	This attribute contains the title, such as "Vice President", of a person within an organization.

The attribute types are used to create search filters. There are six types of basic search filters and the syntax of the filters is in the <attribute><operator><value> format. Complex search filters can easily be constructed by combining these basic search filters and other complex filters using the Boolean operations AND, OR and NOT. The six basic filter components are presented in the table below:

Filter Type	Format	Example	Matches
Equality	(<attr>=<value>)	(sn=Smith)	Surnames exactly equal to Smith.
Approximate	(<attr>~=<value>)	(sn~=&Smitt)	Surnames approximately equal to Smitt (for example, that sounds like Smitt - note the misspelling).
Substring	(<attr>=[<leading>]*[<any>]*[<trailing>])	(sn=*smith*)	Surnames containing the string "smith".
		(sn=smith*)	Surnames starting with "smith".
		(sn=*smith)	Surnames ending with "smith".
		(sn=s*mi*th)	Surnames starting with "s", containing "mi" and ending with "th".
Greater than or equal	(<attr>>=<value>)	(sn>=Smith)	Surnames lexicographically greater than or equal to Smith.
Less or equal than	(<attr><=<value>)	(sn<=Smith)	Surnames lexicographically less than or equal to Smith.
Presence	(<attr>=*)	(sn=*)	All surnames.

Using the Boolean operators and a prefix notation, the basic filters can be combined to form more complex ones. The '&' character represents AND, the '|' character represents OR and the '!' character represents NOT. Here are some examples that explain how to do that:

Filter Type	Format	Example	Matches
AND	(&(<filter1>) (<filter2>) ...)	(&(sn=smith) (objectclass =person))	Entries with an object class of person and a surname exactly equal to Smith.
OR	((<filter1>) (<filter2>) ...)	((sn=smith) (cn=*smith))	Entries with a surname exactly equal to Smith or a commonname ending in "smith".
NOT	(!(<filter>))	(!(mail=*))	Entries without a mail attribute.

Note: ☐ It is wise to create filters that sort out unwanted entries based on their object class. For example, in an address book, you might only want to retrieve entries of the "people" class, with the common name "John", leaving out computers called John. This could be achieved with the following filter:

```
(&(objectclass=person)(cn=john))
```

- ❑ The way you construct your filter will have a large impact on how fast the search is conducted. If you create a filter involving structures that the directory server can not evaluate efficiently, performance is likely to suffer. Apart from being familiar with the administrator and/or the inner workings of the server itself, only trial and error can tell you whether your filter is working efficiently or not.

Example searches

Here are some advanced search examples:

Searched	Filter to use
All persons in Sweden.	<code>(&(objectclass=person)(c=SE))</code>
All entries at Axis independent of country, except the ones called Smith.	<code>(&(o=axis)(!(sn=smith)))</code>
All persons at Axis Marketing in Sweden.	<code>(&(objectclass=person)(c=SE)(o=axis)(ou=marketing))</code>
All persons with a common name containing "bert" at Axis Marketing or Sales.	<code>(&(objectclass=person)(cn=*bert*)((ou=marketing)(ou=sales)))</code>

Appendix C The Parameter List

This table shows the AXIS 700 parameter list. The middle column shows the default values, when applicable. The right-hand column gives a brief description of the parameter.

Important: ☐ The parameters are case-dependent. They must be entered exactly as in the table below.

Parameter name	Value	Description
[Server] HardwareAddress	= 00:40:8c:18:02:3c	Specifies the AXIS 700 hardware address. The default setting is the serial number.
Date	= yy-mm-dd	
Time	= hh:mm:ss	
FactoryDefaults	= no	Set this parameter to yes to reset to factory default settings. Note that all current settings will be lost.
Restart	= no	Set this parameter to yes to restart the AXIS 700.
TimeZone	= UTC	Specifies the time zone in which AXIS 700 operates.
TimeSyncSource	= None	Specifies the time source for the AXIS 700. Valid values are <i>NTP</i> or <i>None</i> .
ServerPassword	= pass	Specifies the Server password. The Supervisor/Administrator will be prompted for this password when trying to access the AXIS 700 for administration tasks. The password is used in basically all protocols, i.e. HTTP, SNMP and FTP. Once written to the configuration file, the password will be replaced by *, representing each letter of the password.
DefaultProfile	= Text	Specifies the default profile.
DefaultPaperSize	= letter	Specifies the default paper size.
TemporaryDestinations	= yes	Specifies if users are allowed to add temporary e-mail destinations.
TemporaryProfiles	= yes	Specifies if users are allowed to add temporary scanning profiles.
WebScanning	= yes	Specifies if users are allowed to use the Scan Document facility. Scan Document means that the user places a document in the scanning device, and then displays or saves the image via the AXIS 700 Web browser interface.
SpecifySender	= no	Specifies if users are allowed to specify the sender when scanning from the AXIS 700 control panel.
Front Panel Configuration	= yes	
PDFRotation	= yes	Enables that all pages are in upright position when scanned double sided.

Parameter name	Value	Description
[IP]		
InternetAddress	= 0.0.0.0	Specifies the AXIS 700 IP address, which must be a unique and valid address to prevent conflicts with other network devices.
DefaultRouter	= 0.0.0.0	Specifies the IP address for the default router. All traffic directed outside the local network (according to the NetMask) is sent to the default router. Any re-routing via other routers is done automatically. The default 0.0.0.0 indicates that no default router is set.
NetMask	= 0.0.0.0	Specifies the subnet mask used for determining whether the traffic should stay within the network or be sent via a router. For example, the normal class C mask is 255.255.255.0. The default 0.0.0.0 indicates that automatic router sensing is used.
BOOTPEnable	= yes	Enables BOOTP for setting the IP address.
RARPEnable	= yes	Enables RARP for setting the IP address.
DHCPEnable	= yes	Enables DHCP for setting the IP address.
DomainName	=	Specifies the name of the domain to which the AXIS 700 belongs. Domain refers to a set of computers on a network that have been assigned a group name. A domain might contain two or more workgroups.
PrimaryDNS	= 0.0.0.0	Specifies the IP address of the primary DNS server. Used e.g. for setting up of destinations with names instead of IP addresses.
SecondaryDNS	= 0.0.0.0	Specifies the IP address of the secondary DNS server, should the primary be unavailable or disconnected.
NTPServer	=	Specifies the name or IP address of the NTP server used for time synchronization.
[HTTP/FTP]		
ExternalLink	=	Specifies the URL to a customized link, e.g. to your company's web site. The link will be available from the AXIS 700 Web browser interface.
ExternalImage	=	Specifies the URL to the image that will indicate the customized external link.
[SNMP]		
GetCommunityName	= public	Specifies the community that has read only access to all supported SNMP objects except WriteCommunity, SupervisorPassword and ftpPassword. It corresponds to the ReadCommunity SNMP object.
TrapDestination	= 0.0.0.0	Specifies the IP Address which SNMP traps are sent to. It corresponds to the TrapAddress SNMP object. Default is 0.0.0.0, which means that all SNMP traps are disabled.
TrapCommunityName	= public	Specifies the community for all generated SNMP traps. It corresponds to the TrapCommunity SNMP object.

Parameter name	Value	Description
SystemContact	=	Optional entry which should be in plain text and may be used to show the name of the system contact person.
SystemName	=	Optional entry which should be in plain text and may be used to show the name of the system.
SystemLocation	=	Optional entry which should be in plain text and may be used to show the location of the system.
AuthenticationTrap	= disabled	Enables or disables the SNMP authentication failure traps. It corresponds to the snmpenableAuthenTraps (MIB-II) SNMP object.
[Clients]		
InformationLevel	= Basic	Specifies the default amount of information to be transmitted with a scanned image. If not set for a destination, this setting will be used. Valid values are <i>Nothing</i> , <i>Basic</i> or <i>Complete</i> . <i>Basic</i> includes information about the AXIS 700, the connected scanning device, the parameter settings used when scanning etc. <i>Complete</i> also includes the image-related profile settings.
FTPDefaultUser	= anonymous	If not set for a destination, this username will be used.
FTPDefaultPassword	= AXIS_700@any.com	If not set for a destination, this password will be used. This field can also contain the identity of the user transmitting the scanned image. This is useful for administrative purposes.
FTPDefaultFileName	= img%3i.%e	If no file name has been assigned to the transmitted file, this name will be used. In the default file name, <i>img%3i.%e</i> , %3i means a 3-digit number and %e means the file extension, e.g. <i>img001.tif</i>
SMTPReplyAddress	=	Specifies the e-mail address of the person responsible for the administration of the AXIS 700.
SMTPSubject	= A scanned image	Specifies the text that will appear on the Subject line of the e-mail containing the scanned image.
URL FTP Server	=	Specifies the IP address of the FTP server on which the scanned image will be stored.
URL FTP User	=	Specifies the user name for logging on the FTP server.
URL FTP Password	=	Specifies the password for logging on to the FTP server
URL Directory	=	Specifies the directory on the FTP server where the image will be stored.
URL	=	Specifies an external URL to the specified directory, e.g. <i>http://www.company.com/documents/filename</i> or <i>ftp://ftp.company.com/documents/filename</i> . This could be necessary when scanning to destinations outside your own company. If left blank, the URL will be constructed from the other fields.
Use URL as default	= no	
[Address Book]		

Parameter name	Value	Description
Retrieve Method	= None	Specifies from where the address book will be retrieved. <i>None, FTP or LDAP.</i>
FTP Server	=	Specifies the name or IP address of the FTP server.
FTP User	=	Specifies the user name for logging on to the FTP server. If left blank, the FTPDefaultUser will be used.
FTP Password	=	Specifies the password for logging on to the FTP server. If left blank, the FTPDefaultPassword will be used.
FTP Directory	=	Specifies the directory on the FTP server where the file is stored.
FTP File Name	=	Specifies the name of the file on the FTP server.
LDAP Server	=	Specifies the name or IP address of the LDAP server.
LDAP Port	=	Specifies the number of the TCP/IP port.
LDAP User	=	
LDAP Password	=	
LDAP Search Base	=	Specifies where to begin the search, e.g. <i>o=companyname, c=countrycode</i>
LDAP Name Field	= cn	Specifies the name of the field that contains the destination name.
LDAP Mail Field	= mail	Specifies the name of the field that contains the e-mail address.
LDAP Filter	=	Specifies an LDAP filter to reduce the length of the destination list, e.g. <i>(givenName=*)</i>
[International] Language	=U.S. English	Specifies the language used on the AXIS 700 message display. Valid values are <i>U.S. English, German, French and Spanish.</i>
Unit	= Inches	Specifies the metric system used, e.g. for paper sizes. Valid values are <i>Inches or Centimeters.</i>
[SMTP] Primary Mail Server	=	Specifies the name or IP address of the SMTP mail server that provides the e-mail facilities for the AXIS 700. If you are using DNS, specify the name. Otherwise, specify the IP address. E.g. <i>mail</i> or <i>mail.domain.com</i> or <i>192.36.253.80</i> .
Secondary Mail Server	=	Specifies the name or IP address of the secondary mail server, should the primary be unavailable or disconnected.
Connection Timeout	= 10	Connection timeout.
[Profiles] Profiles Profiles0	= 8 = Profile-Text	
[Profile-Text]		Note that the parameters in this list applies to all profiles parameters.

Parameter name	Value	Description
Description	=	Specifies the name of the profile. This is the name that will appear on the AXIS 700 message display.
X-Resolution	= 200	Specifies the resolution to be used for scanning in dots per inch (dpi). Higher-resolution settings produce higher-quality scanning. However, your documents might take longer to scan. The resolutions available depend on your scanning device's capabilities.
Y-Resolution	= 200	Specifies the resolution to be used for scanning in dots per inch (dpi).
Data type	= Black & White	Specifies data type depending on the material you are scanning and the imaging application you intend to use.
Paper orientation	= portrait	Specifies how the document should be scanned.
Image compression	=	Specifies the image compression.
File format	=	Specifies the file format.
Double-sided	= single-sided	Specifies whether the scanning device should scan the document on both sides of the paper. This feature is only available for scanning devices that support duplex scanning.
Document mode	=	
Intensity	= 50	Specifies the level of intensity.
Contrast	= 50	Specifies the level of contrast. The contrast is the tonal gradation between the highlights, midtones and shadows in an image.
...		
[Destinations]		
Destinations	= x	Specifies the number of destinations defined in the AXIS 700.
Destination0	= <i>Destination name</i>	
[<i>Destination name</i>]		
Description	=	Specifies the name of the file destination. This is the name that will appear in the destination list on the AXIS 700 message display.
Transfer method	=	Specifies how the scanned image should be sent.
Destination	=	Specifies the e-mail address of the e-mail recipient.
Information level	=	Specifies the amount of image information to be included with the image. See [Clients] InformationLevel.
Profile	=	Specifies the default profile to be used.
Server	=	Specifies the IP address of the FTP server on which the scanned image will be stored.
User	=	Specifies the username for logging on to the FTP server.
Password	=	Specifies the password for logging on to the FTP server.
File name	=	Specifies the file name of the scanned image.
Index file	=	Specifies the number of digits for the sequence number.

Parameter name	Value	Description
[Paper sizes]		
PaperSizes	= 12	Specifies the number of paper sizes defined in the AXIS 700.
PaperSize0	= PaperSize-A3	
...		
[PaperSize-A3]	=	Note that the parameters in this list applies to all paper sizes parameters.
Description	=	Specifies the name of the paper size. This is the name that will appear on the AXIS 700 message display.
Width	=	Specifies the width of the paper.
Length	=	Specifies the length of the paper.
...		
[END]		

Appendix D Updating the Software

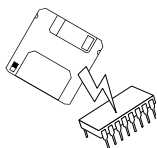
The AXIS 700 software stored in *Flash memory* can easily be updated over the network using FTP. All software updates are free of charge. Instructions on how to carry out the update are supplied with the software update.

Obtaining the Updated Software

- | | |
|---------------|--|
| Your Dealer | Contact your dealer to check if there has been any new issues of the software. You should have your present version numbers ready to compare against the latest software issues from Axis. |
| Axis Web Site | You may wish to check the Axis web site at http://www.axis.com/ , where you can download the latest versions of the software. |
| Anonymous FTP | You can also get files and information through anonymous ftp: log in to ftp.axis.com and go to the <code>/pub/axis/</code> directory. |
| AxisNews | If you subscribe to the AxisNews mailing list, Axis will regularly send you newsletters about new products and updated software etc. Refer to the Axis web site on how to join the AxisNews. |

Flash Memory The software that runs your AXIS 700 is stored in Flash memory. This is a memory chip that, like ordinary ROM memory, keeps its contents even when the power is turned off. What makes it unique is the possibility to erase its contents and write new data to it. This means that when software updates are available for your AXIS 700, you can make use of them without having to replace any parts. The new software is simply loaded into the AXIS 700 over the network.

Updating the Flash Memory



To upgrade over the network you will need the following:

- The file with the new AXIS 700 software. The name of the file is of the form `product-version.bin`, i.e. `700_1_14.bin` for software release 1.14 of the AXIS 700.
- A computer on the network with TCP/IP and FTP.

Follow these steps to upgrade the AXIS 700 software:

1. Log in to the AXIS 700 with the command `ftp <IP address>` where `<IP address>` is the name or IP address assigned to the AXIS 700.
2. You will be prompted for user id and password. Use the user id `root` which has the default password `pass`.
3. Issue the command `bin` to change to binary transfer mode.
4. Issue the command `put <software name> flash` where `<software name>` is the name of the new software, e.g. `700-1_14.bin`.
5. During the flash load, the AXIS 700 LCD will display the message “Upgrading server” and a progress bar. Wait for the flash load to finish. This normally takes 1 to 4 minutes. The unit will then automatically restart with the new AXIS 700 software.

Caution!

Be careful not to interrupt the file transfer. If the transfer is interrupted, the AXIS 700 may have to be re-initialized by your dealer.

6. Log out using the command `quit`, `bye` or `exit` depending on your FTP version.

Notes:

- ☐ If you are using a window-based FTP client application such as `Ws_ftp` or `Fetch`, you must rename the new file `<software file>` to `flash` before downloading.
- ☐ It is recommended to upload the current configuration before upgrading. See “*Configuring using FTP*” on page 51.

- ❑ You can also update the Flash memory using the flash loading port. For more information on this option, please contact your local dealer or distributor.

Appendix E Technical Specifications

Supported Systems Systems that support TCP/IP, Hypertext Transfer Protocol (HTTP) client (Web browser), and at least one of these protocols:

- File Transfer Protocol (FTP) server
- Simple Mail Transfer Protocol (SMTP) server

Supported Web Browsers

- Netscape Navigator 3.0 or higher
- Microsoft Internet Explorer 3.0 or higher
- HTTP 1.0+ and HTML 3.0+ compatible Web browsers

Supported Protocols HTTP, FTP, SMTP, TCP, IP, ARP, RARP, BOOTP, DHCP, ICMP, SNMP, LDAP and NTP.

Supported Scanning Devices

The AXIS 700 automatically senses the brand and model of the attached scanning device, if supported. No user intervention is needed. AXIS 700 supports digital copiers and scanners from the following manufacturers:

- Avision
- Bell+Howell
- Canon
- Fujitsu
- Gestetner
- Infotec
- Hewlett Packard
- Lanier
- Nashuatec
- Océ
- Rex Rotary
- Ricoh
- Savin
- Sharp

For the most recent list of supported scanners and copiers, check the AXIS 700 web site http://www.axis.com/products/axis_700/ or contact your local dealer.

**Supported LDAP
Server Software**

- Microsoft Exchange 5.0
- Lotus cc: Mail 8.2
- Novell GroupWise 5.2

**Supported Image
Formats**

- TIFF 6.0, CCITT G.3 and G.4 for black/white images, PackBits for grayscale images; both single- and multipage TIFF are supported. Uncompressed for all image types.
- JPEG File Interchange Format (JFIF) for single-page images.
- Adobe PDF 1.2, CCITT G.4 for black/white images, JPEG compression for color and grayscale images; both single- and multipage PDF are supported.

Control Panel

Alphanumeric LCD display with 2 rows by 16 characters, side-scrollable by 40 characters. English, German, French, Spanish, Italian and Swedish text available.

4 LED indicators signaling Status, Busy, Network, and Power.

7 keys for Menu, Up, Down, Enter, Send, Scan, and Cancel.

Menu for selecting Destination, Scanning profile, Paper size, and Double-sided. Multiple selection of destinations is possible. Error log.

Installation

IP address set from control panel or with ARP, RARP, BOOTP or DHCP. For scanning to e-mail and file destinations, the destinations must be set up from a Web browser, or downloaded via LDAP or from an FTP server.

**Network
Management**

Configuration and Administration via a Web browser.

SNMP MIB-II

Security

Administrator's login for configuration and administration.

Administrator specifies which destinations should be accessible and whether users are allowed to add temporary e-mail destinations.

Possible to set a default destination (and optionally no other) for fixed application use.

Number of Destinations	Depending on the length of the addresses, the Administrator can define 50-100 destinations within the AXIS 700. The maximum number is limited by the EEPROM memory. If using LDAP or server-based address lists, the number of destinations is limited to the available RAM.
Software Updates	Flash memory allows central and remote updating of the AXIS 700 software over the network using FTP.
Hardware	CPU: 32 bit RISC Controller (AXIS ETRAX) Flash memory: 2 Mbytes RAM: 2 Mbytes EEPROM: 8 kbytes
Logical Connection	IEEE 802.2, IEEE 802.3, SNAP and Ethernet II frame types simultaneously.
Attachments	
Network Connectors	10baseT (twisted pair) and 10base2 (thin) for Ethernet
Optional Accessories	SCSI cable: 50 pin high-density shielded (micro-D) SCSI cable: 50 pin high-density shielded to 50 pin shielded low-density (Centronics)
Power supply	12V DC (36VA), via external power unit (AXIS PS-C) or 12V DC (13,2VA), via external power unit (AXIS PS-E)
Dimensions	Height: 1.7 in (4.3 cm) Width: 5.9 in (14.9 cm) Depth: 8.8 in (22.4 cm)
Weight	1.5 lbs (0.7 kg)
Environmental	Temperature: 40-105°F (5-40°C) Humidity: 20-80% RHG, noncondensing
Approvals	
EMC	FCC Subpart B, Class A; CE EN 55022/1994, EN 50082-1/1992.
Safety	EN 60950, UL, CSA
Warranty	3 years.



All specifications are subject to change without prior notice.

Appendix F Glossary

ADF	Automatic Document Feeder.
AIX	Advanced Interactive eXecutive. A version of the UNIX operating system from IBM that runs on various IBM computers including Mainframe systems.
ARP	Address Resolution Protocol. A protocol within TCP/IP networks that allows a host to find the physical address of a node on the same network.
BOOTP	Boot Protocol. A TCP/IP protocol, which allows an Internet node to discover certain start-up information such as its IP address.
BSD	Berkeley Software Distribution. The University of California, Berkeley additions to the UNIX operating system.
CCITT G.4	The most common format for compressed TIFF files. Used for viewing and archiving of scanned documents.
CMIP	Common Management and Information Protocol.
DHCP	Dynamic Host Configuration Protocol. A system based on network interface card addresses, which is used to allocate IP addresses and other configuration information for networked systems.
dither	A method of obtaining a rasterized effect for pictures, especially scanned photos.
DNS	Domain Name System. A hierarchical naming system that uses a combination of text names separated by periods to create a unique name.
duplex	A scanner/printer with the capability to scan/print both sides of a page simultaneously.

FTP	File Transfer Protocol. The TCP/IP protocol used for transferring files between computers on a network.
HTML	Hypertext Markup Language. A standard hypertext language used to create web pages and other hypertext documents.
HTTP	Hypertext Transfer Protocol. The TCP/IP protocol for web based communication, e.g. Web browsers.
IP	Internet Protocol. The TCP/IP session-layer protocol that regulates packet forwarding by tracking IP addresses, routing outgoing messages, and recognizing incoming messages.
JFIF	JPEG File Interchange Format. Format for storing bitmap images.
JPEG	Joint Photographic Experts Group. Compression type for color and greyscale bitmap images.
LCD	Liquid Crystal Display.
LDAP	Lightweight Directory Access Protocol. A protocol for accessing on-line directory services.
LED	Light Emitting Diode.
MIB	Management Information Base. A database of network configuration information used by SNMP and CMIP to monitor or change network settings.
MIME	Multipurpose Internet Mail Extension. Enables transmission of e-mail containing non-English characters as well as attachments such as image files.
NTP	Network Time Protocol. A protocol to get the time from a timeserver (NTP-server). (To get the time when a message was stored in the event log, a NTP server must be specified.)

OCR	Optical Character Recognition. A technology that converts scanned documents into editable and searchable text.
PDF	Portable Document Format. A format for cross-platform distribution of electronic documents. Can be viewed by anyone that has Acrobat Reader from Adobe installed.
RARP	Reverse Address Resolution Protocol. A TCP/IP protocol governing the translation of a Data-Link Control (DLC) address to an IP address.
RISC	Reduced Instruction Set Computing. A processor that recognizes only a limited number of assembly-language instructions.
SCSI	Small Computer System Interface. A high-speed parallel interface, used to connect a computer to peripheral devices using just one port.
SMTP	Simple Mail Transfer Protocol. The TCP/IP protocol for exchanging e-mail.
SNMP	Simple Network Management Protocol. A TCP/IP protocol used to manage and monitor nodes on a network.
TCP	Transmission Control Protocol. The connection-oriented, transport-level protocol used in the TCP/IP suite of protocols.
TIFF	Tagged Image File Format. Format for storing bit-mapped images. Typically used for scanned documents and uncompressed images.
UNIX	A 32-bit multitasking, multiuser operating system originally developed by AT&T.
URL	Uniform Resource Locator. A way of specifying the location of publicly available information on the Internet.
UTC	Universal Time Coordinated

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